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Highlights

- WTO blow to EU sugar regime
- Fischler rejects Turkish accession
- EU delays vote on GM seed thresholds
- Problems ahead over Russian vet deal
- Don't subsidise biofuels, says OECD
- Rows ahead over EU budget rebates
- Rising supplies pressure wheat
- French farm income trends down

WTO rules EU sugar export refund system illegal

The World Trade Organisation this week confirmed its preliminary ruling that the EU's sugar export system contravenes world trade law in certain respects, underlining the need for fundamental reform of the EU's support regime.

The verdict, which upholds an interim judgement delivered at the beginning of August, was delivered confidentially to the protagonists in the case on Wednesday.

But the EU, although refusing to comment on the case in any detail, has already signalled that it will probably appeal against the dispute settlement panel's conclusions.

This means that it is likely to be almost another year before the case is finally laid to rest.

WTO judges upheld the case lodged by Brazil, Australia and Thailand, stating that the EU's officially unsubsidised exports of non-quota 'C' sugar were in fact "cross-subsidised" by the high prices derived from A and B quota production.

This cross-subsidisation constituted an export subsidy as defined by Article 9.1(c) of the WTO's Agriculture Agreement, and the "payments" are therefore subject to the EU's export subsidy reduction commitments as agreed during the previous Uruguay Round of trade talks.

The EU agreed to limit its subsidisation of sugar exports at 1.28 million tonnes per year and to limit expenditures for such subsidies at €499 million per year.

The panel found that the addition of the subsidised C sugar exports put the EU well above both its volume and budgetary outlay amount commitments.

Canadian dairy precedent

Officials said the panel basically followed the reasoning of an earlier panel which ruled on a dispute filed by the United States and New Zealand against Canada's dairy export system.

The panel in that case found that high prices guaranteed to Canadian dairy producers for milk sold domestically allowed them to effectively sell milk products at a price below the cost of production, thus constituting an export subsidy.

That ruling was upheld by the WTO's Appellate Body in a ruling in December 2002.

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AGRONEGOCIOS

SEMANARIO INDEPENDIENTE DE INFORMACIÓN AGRÍCOLA, GANADERA Y ALIMENTARIA

AÑO VI / Número 248 / Semana: 13 - 19 SEPTIEMBRE 2004

AgroNegocios, Origen, Vida Rural y Mundo Ganadero son publicaciones de Eumedra, S.A. www.eumedra.es

Consejo informal Agrario: Franz Fischler se despide

El comisario de Agricultura y Pesca de la UE, Franz Fischler, aprovechó el Consejo informal de Ministros de Agricultura que tuvo lugar la pasada semana en Holanda para despedirse con un discurso en donde subrayó que «no lamenta nada respecto a su labor» al frente del sector agrario comunitario.

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Fue el segundo receptor de estos fondos después de Francia

España recibió el pasado año 6.500 Meuros para su sector agrario

Un total de 6.485,4 millones de euros recibió el pasado año España como fondos de la Unión Europea destinados al sector agrario, lo que supuso

el 14,61% del total comunitario, porcentaje sólo superado por Francia (con 10.464,1 Meuros, el 20,58%), según se destaca en el balance anual

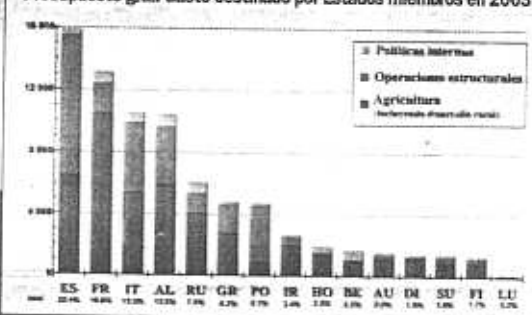
presentado la semana pasada por la comisaría de Presupuestos, Michael Schreyer.

De estos fondos que recibió España, 4.340,9 millones de euros se destinaron a las producciones vegetales, 1.492,2 millones a la ganadería y otros 495,4 millones fueron a parar al desarrollo rural.

Asimismo, el informe destaca que España fue el principal beneficiario, en términos nominales, del presupuesto general de la UE a 15 Estados miembros, al recibir un 20,4% del total (8.733 millones de euros), y que, por su parte, nuestro país aportó 7.429 millones de euros.

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Presupuesto gral. Gasto destinado por Estados miembros en 2003



Los herbáceos de secano, sin "multa" en la ayuda PAC

Los cultivos herbáceos de secano no tendrán penalización en la ayuda PAC de la campaña 2004/05 (cosecha de 2004), según el segundo avance del REGA sobre solicitudes de ayuda, al no superar el límite garantizado de siembra.

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Valencia y Aragón, las CC.AA. más afectadas

Pérdidas millonarias en el campo por las tormentas

Las tormentas, con pedrisco, viento y lluvias torrenciales, causaron en los primeros días de septiembre cuantiosas pérdidas en el campo y en las infraestructuras rurales de las comunidades autónomas de Valencia y Aragón; principalmente, pero también y de manera puntual en cultivos de temporada en Navarra, Rioja,

Castilla y León, Galicia y Región de Murcia.

Los sectores agrícolas más afectados fueron los cítricos, sobre todo en la Comunidad Valenciana, las frutas y hortalizas, el viñedo, maíz, alfalfa, arroz y girasol.

Las organizaciones agrarias ya han solicitado medidas paliativas urgentes.

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CCAEE prevé 44.220.000 hl de vinos y mostos

MAPA y sector aparcen la destilación de crisis

Ministerio de Agricultura y sector acordaron aparcen por ahora la petición a Bruselas de una destilación de crisis, tras la reunión del 7 de septiembre pasado, debido a las perspectivas de una vendimia de menor producción, y centrar todos los esfuerzos en lograr el máximo posible en la destilación de alcohol de usos

de boca, a la cual se espera llevar al menos 7 millones de hectolitros de vino de mesa.

Por otra parte, la Confederación de Cooperativas Agrarias (CCAEE) realizó una estimación de 44,2 millones de hectolitros de vinos y mostos para la campaña actual 2004/05, un 6,7% menos que en la precedente.

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Implicaciones del conflicto en el sector del porcino Ibérico de Huelva

Opinión del veterinario
José Luis Pérez Gil

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Saldo positivo de 1.681 Meuros en el
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situó en 2.500.000 de toneladas

AGROCALIDAD

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Rías Baixas vendimiará este año la mayor cosecha de su historia

Más de 12.000 euros paga un restaurante
por medio queso de Idiazábal



REPUNTE DE LAS CARNES DE OVINO Y DE AVE

Las frutas y hortalizas moderaron la subida del IPC del pasado mes de agosto

Al contrario de lo que sucedió en agosto
de 2003, el comportamiento favorable de

Las frutas frescas no observaron cam-
bios en agosto, subiendo un moderado 2%



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Agricultura presenta los vehículos para la recogida de cadáveres de animales en Aragón

El Departamento de Agricultura y Alimentación del Gobierno de Aragón, a través de la empresa pública SIRASA (Sociedad de Infraestructuras Rurales Aragonesas), efectuará la recogida de cadáveres de animales en explotación de la Comunidad aragonesa a partir del próximo día 15 de septiembre.

El consejero de Agricultura y Alimentación, Gonzalo Argüel, acompañado por el director de SIRASA, José María Sallán, asistieron la semana pasada al acto de presentación de la primera entrega de los vehículos adquiridos para la realización de este servicio público, que en esta primera fase se centralizarán en el Centro Logístico de Casetas.

Se trata de la entrega de los primeros siete vehículos de los doce adquiridos por SIRASA para realizar la retirada de cadáveres de animales. Con estos vehículos se realizará, a partir del 15 de septiembre de 2004, la recogida de bovino en la Comunidad Autónoma de Aragón que se venía realizando hasta ahora por el sector privado.

A partir de enero de 2005, se ampliará la recogida al resto de especies (ovino-caprino, porci-

no, equino, cunil y avícola) en un total de once comarcas de la Comunidad aragonesa: Cinco Villas, Hoya de Huesca, Monegros, Bajo Cinca, Ribera Alta del Ebro, Jalón Medio, Ribera Baja del Ebro, Campo de Cariñena, Campo de Belchite, Bajo Martín y La Litera. La previsión es que para el año 2006 se recojan todas las especies citadas en toda la Comunidad aragonesa.

Estos vehículos tienen una carga útil de 7.000 kilos y están equipados con una caja basculante estanca para evitar vertidos. La puerta trasera está fabricada en acero inoxidable y las puertas disponen de apertura mecanizada en la parte superior para evitar, igualmente, olores y vertidos. Todos los vehículos están equipados con una grúa para la carga de animales y contenedores.

La ubicación de estos vehículos para la retirada y transporte de cadáveres de animales está prevista en centros logísticos (espacios donde se guardan los camiones, limpios y vacíos, después de la descarga en las industrias de transformación situadas en Aragón, y previa a una limpieza y desinfección que se efectuará obligatoriamente y de forma controlada después de cada descarga).

Para este primer ejercicio entra en funcionamiento el Centro Logístico de Casetas, mientras que está prevista la creación de un segundo centro logístico en la comarca de La Litera para el año 2005, concretamente en la localidad de Tamarite. Asimismo, se prevén otros tres centros de estas características en la provincia de Teruel y un

segundo centro en la zona del Pirineo para el año 2006.

Pruebas de EET

El Consejo de Gobierno ha aprobado la renovación, por cuarto año consecutivo, del convenio de colaboración que sostiene con la Universidad de Zaragoza para el mantenimiento del Laboratorio Autonómico para las Encefalopatías Espongiformes Transmisibles. Este convenio cuenta con una financiación por parte del Gobierno de Aragón de 177.063 euros, destinados a la realización de pruebas rápidas de diagnóstico y al desarrollo de programas de formación e información.

Siguiendo la normativa dispuesta por el Parlamento Europeo y del Consejo, la Comunidad Autónoma de Aragón presta servicios de pruebas rápidas de diagnóstico a todos aquellos animales, de las especies bovina, ovina o caprina, incluidos dentro de posibles poblaciones de riesgo. Para ello se firmó, en julio de 2001, el primer convenio de colaboración con la Universidad de Zaragoza a través del cual se puso en marcha el Laboratorio Autonómico para las Encefalopatías Espongiformes Transmisibles. Un convenio que se ha renovado en los años 2002, 2003 y ahora para 2004.

Convenio con los colegios de veterinarios

El Consejo de Gobierno ha aprobado la renovación de los convenios de colaboración que el Gobierno de Aragón mantiene desde 1997 con los Colegios Oficiales de Huesca, Zaragoza y Teruel; convenios que reciben periódicamente financiación para la realización de estudios pertinentes previstos por el Departamento de Agricultura y Alimentación.

Para 2004 ha aprobado casi 60.000 euros, que serán destinados a la realización de estudios, recogida de datos y bases estadísticas, a desarrollar por los tres Colegios Veterinarios. Concretamente se recopilarán datos derivados de encuestas de producción e identificación de bovino, ovino, caprino y porcino, cunicultura y avicultura y sacrificio en mataderos.



MULTICAJA

Caja Rural Aragonesa y de los Pirineos

Boletín de Estudios Económicos

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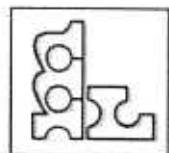


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FRUTA

EFFECTO MARIPOSA

El pánico todavía presente en el ánimo de los ganaderos a verse castigados en la selección de suministradores por el matadero, tal y como les ocurrió en la dura derrota de agosto, llevó desde el mismo cierre de la lonja anterior a una renuncia incondicional a la última subida (+2,2) ante el preaviso de la demanda catalana de que no la consideraba coherente con la disponibilidad de oferta que tenía, y de que para la semana entrante sólo sería compradora a -2,2. El "efecto mariposa", más propio de los grandes mercados financieros, tomó pronto cuerpo en un mercado primario adicto a las relaciones de dominio. Un aleteo en el rincón de los mataderos catalanes derivó en un gigantesco revuelo en todo el espacio. Los productores se desmelenaron en carreras vendedoras, y los mataderos del resto del Estado se apresuraron a aplicar la rebaja para no quedarse rezagados frente a la iniciativa de sus competidores, tal y como ya les pasó en la batalla de los -4, con una semana de regateo entre cotización de lonja y precio real.

La pasmosidad con que el matadero ha visto en todo este proceso cómo se le anotaban los cerdos obedientes a su precio, sin esperar a ver la evolución comercial de la semana o los movimientos de otros mercados europeos, dejaba esta lonja predestinada sin más a rectificar el avance de la anterior con el cierre simétricamente opuesto a -2,2. Así se ha abierto, y así se ha cerrado. Poco podía importar que, en la misma jornada en que debía negociarse el precio, los mercados del Norte cotizaran con alzas no menos sorprendentes que la bajada prefabricada en España. Alemania, a +3 céntimos canal, encendía el reguero que llegaba a Bélgica (+2 céntimos en vivo) y Holanda (indicador de +3 para la cotización del viernes). Francia, siempre a caballo entre las cotizaciones del norte y del sur, promediaba la semana con menos de un céntimo nominal, pero también al alza.

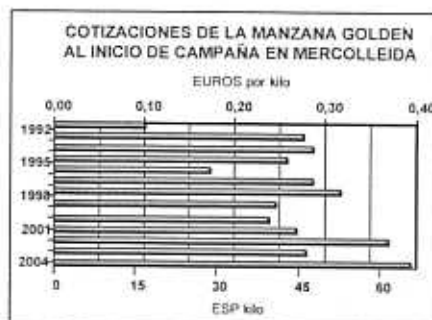
Nada de todo eso servía porque las

(Pasa a la página 3)

GOLDEN DE ORO

Ha empezado la recogida de la manzana Golden, variedad dominante en la fruticultura de Lleida, con unos registros entre 38 y 41 céntimos de euro que no tienen precedente en las series históricas de la Lonja, y cuya posición más cercana fue la de dos campañas atrás, en la 2002-2003, cuando arrancó con una cotización de 35-38 euros, siendo también ese máximo histórico en su momento.

Las operaciones que se practican desde central no son todavía relevantes para poder acreditar que este punto de partida sea suficientemente sólido, pero el ánimo de campaña es efectivamente el de operar a precios altos; será en los próximos días cuando los mercados de destino muestren o no su capacidad de admisión en unos momentos en que la saturación de todo tipo de frutas de



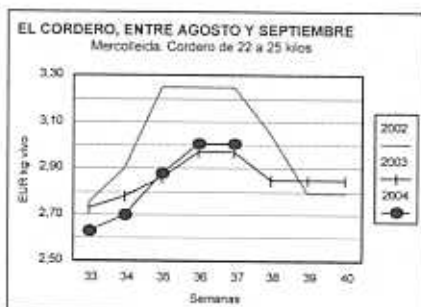
temporada no deja espacios a la sobrevaloración de precios, y en la que, si efectivamente se consolidan valores altos, a un par o tres semanas vista se presentará la competencia de la manzana francesa.

En cualquier caso, el sondeo del precio por las bandas altas resulta actuación inherente a una campaña que, con perspectiva de origen, se presenta como una de las de más cortas en producción de la historia (ver anteriores informes de mercado) y con un gran nerviosismo de agricultor por empezar a coger género para disfrutar de los buenos precios que determinados operadores se han apresurado a pagar en campo.

En base a estos primeros tratos, y las perspectivas de cotización indisimuladamente al alza para todo lo largo del desarrollo de campaña, esta cotización de partida resultaría incluso moderada (se han pagado el equivalente a las 60 pesetas en operaciones importantes del Urgell). Pero desde la complejidad de la gestión de los grandes volúmenes que mueve esta variedad, y de lo insondables que resultan los mercados de destino a medio plazo, ni que decir tiene que forzar el inicio de campaña con máximos históricos provoca vértigo entre los comerciales. Una gran incógnita amenazará la campaña de comercialización, cual es el grado de presencia de *biter pit*, inevaluable en este momento de la recolección y que, si se declarara efectivamente extenso, acabaría por frustrar las posibilidades de precio de la Golden doméstica en beneficio de la que llegue de fuera.

* Han empezado también a recoger-

OVINO



TECHO EN EL CORDERO

No va a más. Una oferta en campo pertinazmente escasa no evita la cita estacional del cordero con la estabilización de su máximo estival.

La entrada en septiembre es la época en la que se han de poner a prueba la capacidad de admisión del consumo ante los altos precios que deja la escalada de julio y agosto. Las dos últimas semanas fueron de verdadera dificultad para encontrar el ganado necesitado por los grandes operadores de la demanda. A menudo, se tuvo que recurrir, al menos en la zona del ámbito más inmediato de la lon-

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Editor's note

This issue of *California Agriculture* examines the significant hurdles to commercial development for genetically engineered horticultural crops. In a future issue, *California Agriculture* will look at the benefits and risks of agricultural biotechnology.

We gratefully acknowledge the contributions of the chairs and editors for this issue. The chairs were Julian M. Alston, Professor of Agricultural and Resource Economics; and Kent J. Bradford, Professor of Vegetable Crops, UC Davis. Associate editors for the peer-reviewed articles were Steven A. Fennimore, Richard J. Sexton, Sheri Zidenberg-Cherr and David Zilberman.

Due to cutbacks related to the state's budget deficit, *California Agriculture* will be publishing four issues in 2004 instead of six.

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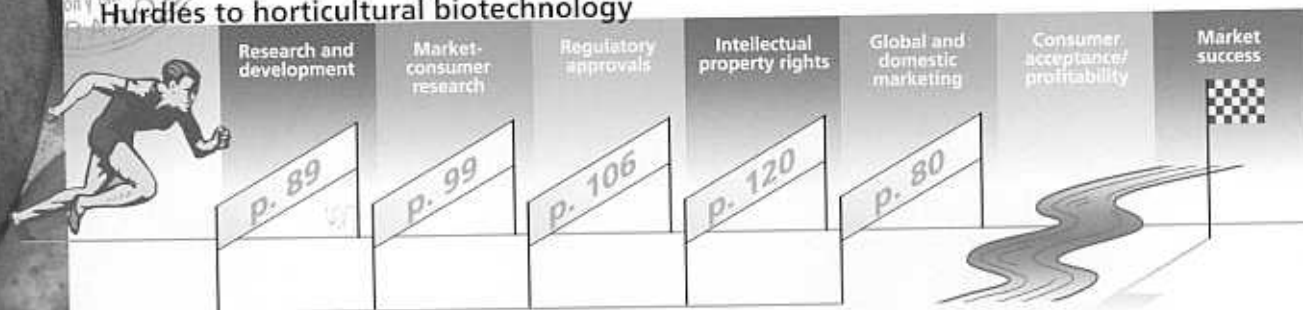
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Hurdles to horticultural biotechnology



Cover: To learn more about citrus floral development genes, UC Riverside scientists are inserting them into tomato plants (inset), which express them rapidly. The goal is to improve citrus breeding by producing early-flowering citrus seedlings, which normally do not flower for 5 to 13 years. Photo by Martha Orozco-Cardenas.

U.S. field tests of genetically engineered crops, 1997-2003

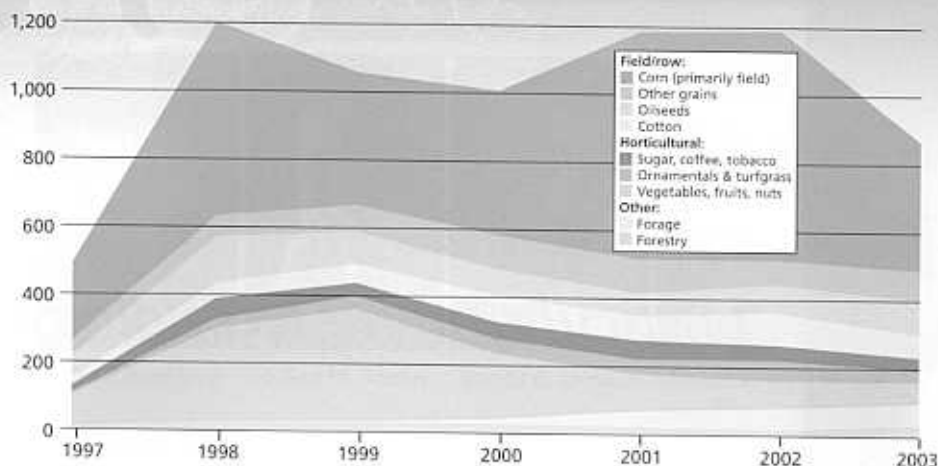


Figure courtesy of Gregory D. Graff. Sources: <http://www.isl.vt.edu/cfdocs/fieldtests1.cfm>; <http://usbiotechreg.nbiil.gov>.

Despite the initial development and introduction of bioengineered horticultural crops (such as tomatoes, potatoes, sweet corn, squash and papayas), little acreage of these is currently in commercial production. There has been a marked reduction in research and investment in biotechnology for horticultural crops. In the peak year of 1999, there were 374 field-test notifications or permits filed for biotech horticultural crops; in 2003, the

total number had fallen to 97. This contrasts with continued research in biotech corn, cotton and soybeans, for which 506 permits or notifications were recorded in 1999 versus 520 in 2003. Even corrected for differences in crop value, horticultural crops are receiving less research investment per dollar of crop production, and no biotech horticultural variety has been deregulated since 1999, with only one since 1997.

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The Canadian Entomologist

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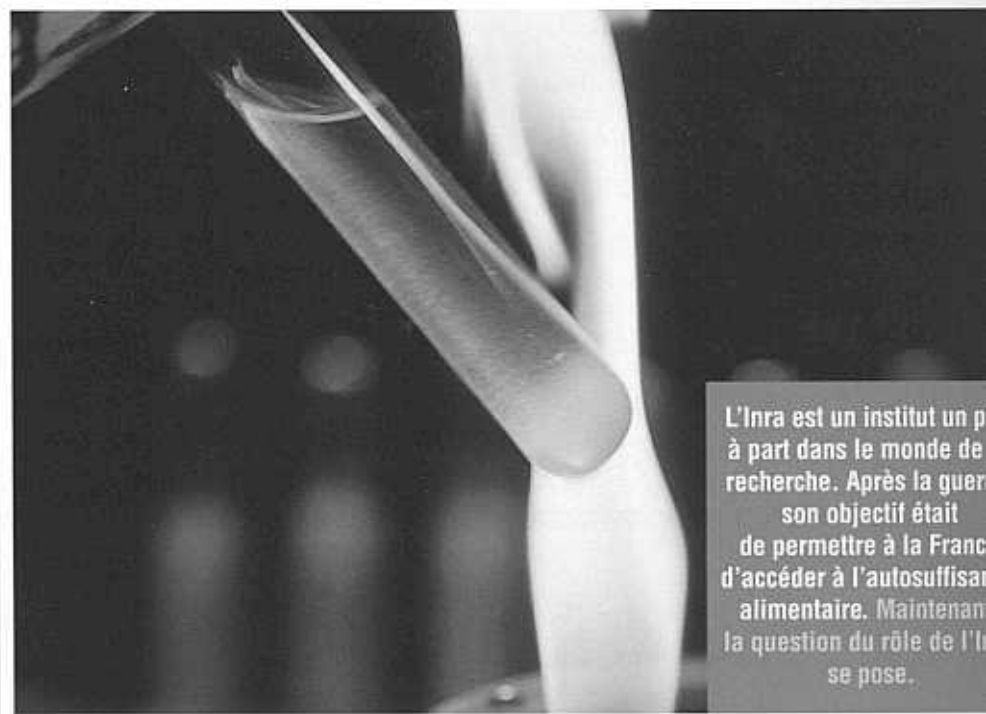
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L'Inra se cherche

Fin octobre, la recherche française définira son avenir après un an de crise ouverte. Le personnel et la direction de l'Inra, l'institut spécialisé en agriculture, présentent leurs intentions.

Les chercheurs ne sont pas vraiment des gens qui se mettent en grève tous les quatre matins. Vraiment pas. Alors quand les directeurs de la recherche française ont démissionné de leurs fonctions administratives, en mars, c'est que le malaise devait être suffisamment grand. Depuis, les scientifiques se sont emparés du débat. Un colloque, qui tiendra lieu d'états généraux de la recherche, fixera leurs volontés en octobre. Elles devraient servir de socle à la loi d'orientation et de programmation de la recherche promise par le président de la République. Comme tous les organismes nationaux, l'Institut national de la recherche agromatique (Inra) a fixé ses intentions.

Le 8 juillet à Paris, le personnel de l'Inra d'une part et sa direction de l'autre ont présenté leurs contributions remises la veille aux ministres de tutelle et au président du Comité d'initiative de proposition. Deux réflexions ont été menées concomitamment depuis mars. D'un côté, la direction de l'Inra. Et de l'autre, le personnel. 18 centres, sur les 21 que compte l'institut, de treize départements sur quatorze. Pour le personnel, la direction a envoyé un questionnaire sur le thème « Quelles questions pour la recherche finalisée à partir de l'exemple de l'Inra ». Les centres ont renvoyé leurs contributions. Un groupe de chercheurs a rédigé une synthèse.



L'Inra est un institut unique à part dans le monde de la recherche. Après la guerre, son objectif était de permettre à la France d'accéder à l'autosuffisance alimentaire. Maintenant, la question du rôle de l'Inra se pose.

Posez-vous les bonnes questions avec



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Feedstuffs

THE WEEKLY NEWSPAPER FOR AGRIBUSINESS

Corn gets cheaper after USDA report

By GIL GULLICKSON

Feedstuffs Correspondent

If you're in a buying mood for feed grains, oilseeds and related ingredients, you had to like the U.S. Department of Agriculture's Aug. 12 production and supply and demand reports.

Analysts and traders expect oilseed and feed grain prices to fall in the next several months as stocks rebuild.

Typically, USDA throws the trade a curveball with its August report, and it did just that once again. Corn futures decreased after the USDA projected a record 10.923 billion bushel crop — far above the average trade estimate of 10.780 billion.

Meanwhile, USDA surprised the

trade with its soybean production projection of 2.877 billion bushels, below last month's estimate of 2.940 billion and the average trade estimate of 2.958 billion.

USDA also lowered its yield estimate from July's 39.9 bu.-per-acre estimate to 39.1 bu. per acre — and, it projected 2004-05 ending stocks at 190 million bushels, down from the average trade estimate of 255 million and last month's 210 million.

Steady slope downward

Not surprisingly, nearby soybean futures responded with a 50-cent rally for the day. However, soybeans likely will join corn in a steady downward

slope in the next few months — bad news if you're a seller but good news for feed grain, oilseed and feed ingredient buyers.

The reason? USDA pegged 2004-05 world ending stocks at a record 50.20 million metric tons, up from July's estimate of 47.0 mmt and this year's 36.19 mmt.

Bear in mind that the projected U.S. soybean crop is still large, dwarfing production of 2.42 billion bushels in 2003.

"On top of that, a return to normal soybean yields in South America combined with an ongoing expansion in acreage would increase production there by more than a half-billion bushels from

Grains/ p. 25

Reaction to FDA BSE proposal mixed

By SARAH MUIRHEAD

Editor of Feedstuffs

The Food & Drug Administration's advance notice of proposed rulemaking (ANPR) regarding the mitigation of risks related to bovine spongiform encephalopathy (BSE) — and its short 30-day comment period — left industry groups scrambling this past month to develop their official responses.

Comments were still coming in at press time Aug. 13, but early indications were that industry reaction to FDA's ANPR were mixed, with calls for an all-out immediate ban on the removal of specified risk materials (SRMs) from all animal feed and others indicating

that the existing safeguards are adequate.

On July 14, FDA released its long-awaited steps to strengthen existing BSE safeguards in the U.S. Issues involving animal feed and pet food came in the form of a formal request for public comment. The four key issues in the ANPR were:

- Removal of SRMs from all animal feed, including pet food, in order to control the risks of cross contamination throughout feed manufacturing and distribution and on the farm due to misfeeding;

- Requiring dedicated equipment or facilities for handling and storing feed

and ingredients during manufacturing and transportation to prevent cross contamination;

- Prohibiting the use of all mammalian and poultry protein in ruminant feed to prevent cross contamination, and

- Prohibiting materials from non-ambulatory disabled cattle and dead stock from use in all animal feed.

FDA said at the time of the ANPR release it had tentatively concluded that it should propose to remove SRMs from all animal feed and was working on a proposal to accomplish that goal.

In fact, many of the 30 questions FDA posed in its ANPR pertained to its

SRMs/ p. 4

Half-million cattle in Canada in need of home

By IAN ELLIOTT

Feedstuffs Correspondent

With more than 500,000 head of cattle expected to be looking for a home by the end of this year, Canadian industry and governments are honing a strategy to deal with the possibility that their main export market — the U.S. — may stay closed until after elections Nov. 2.

The latest round of meetings was held Aug. 6 in Ottawa, Ont., to review a proposed strategy built on boosting domestic slaughter capacity, diversifying markets, delayed marketings, more surveillance and income relief. Officials said a final plan could go to governments as early as next month.

"We had a frank and open discus-

sion with Agriculture Canada officials who were supportive of (the Canadian Cattlemen's Assn.) CCA's strategy," Stan Eby, president of CCA, said in a statement issued in Calgary, Alb., following the meeting.

"I feel we made progress. We'll be hammering out the details of these proposals in the coming days," he added.

U.S. authorities have banned imports of Canadian cattle since a single animal in Alberta was found 14 months ago with bovine spongiform encephalopathy (BSE). U.S. restrictions on Canadian beef were later eased.

In 2002, Canada exported more than 1.6 million head of cattle and 400,000 metric tons of beef to the U.S.

Cattle/ p. 20

Cattle group files claims over U.S. border situation

By SALLY SCHUFF

Feedstuffs Washington Editor

WASHINGTON, D.C. — A grassroots organization of Canadian cattle feeders, fed up with the U.S. border closure, filed a \$150 damage claim last week against the U.S. government under provisions of the North American Free Trade Agreement (NAFTA).

Canadian Cattlemen for Fair Trade (CCFT) filed five notices of intent to challenge the U.S. Department of Agriculture on failure to reopen the border to live cattle from Canada, charging that U.S. actions were "arbitrary and discriminatory."

The first five claims were filed Aug. 12 and were announced at a press event in Alberta. They are the first of what CCFT hopes will trigger more claims from Canadian cattle operations, which CCFT predicts could "grow dramatically."

The USDA press office did not return a phone call seeking official U.S. reaction to the NAFTA challenge.

Alberta feedlot owner Rick Paskal, who hinted at the action to Feedstuffs in early August (Feedstuffs, Aug. 9), said in a press statement announcing

Inside News

WTO on market access

A key argument advanced by trade negotiators from developed countries is that they are willing to cut domestic farm subsidies and drastically reform rules on export competition in World Trade Organization talks, as long as the rest of the world offers improved access to its domestic markets. Page 3.

Salmonella prevalence

The U.S. Department of Agriculture reported that federally inspected meat and poultry products show a downward trend in salmonella contamination compared with a baseline developed prior to implementation of the agency's major food safety rule. Page 3.

USDA resumes livestock insurance

Federal insurance policies for Livestock Risk Protection for feeder and fed cattle, which the U.S. Department of Agriculture suspended after the first U.S. case of bovine spongiform encephalopathy, will resume Oct. 1 under new provisions. Page 4.

Poland agriculture

In the newly expanded European Union, distorted welfare and land transfer regulations are preventing Poland's agriculture sector from speeding up modernization. Page 5.

Meat consolidation

Across all sectors, food production is consolidating into fewer but larger and more efficient operations to respond to consumer demands of their food, including meat and poultry, according to an agriculture economist. Page 8.

Business

Terra to acquire Mississippi Chemical

Terra Industries Inc. and Mississippi Chemical Corp. announced that they have reached a definitive agreement under which Terra will acquire all of the outstanding shares of Mississippi Chemical for an estimated \$268 million. Page 6.

Beef Nutrition & Health

Dietary protein

A common theme in feedlot nutrition has been dietary protein's role in minimizing nutrient excretion, especially nitrogen, of feedlot cattle. Page 9.

Markets

Ingredients dive

The soybean rally temporarily halted the downward spiral of soybean meal — with cash soy meal prices, in some areas, pushing upward \$20 and, in others, declining \$10 or more. Page 25.

Cattle feeders win

Cattle feeders waited out packers for higher prices last week; midyear revisions to the poultry profitability series show improved returns, with the

THE WEEKLY NEWSPAPER FOR AGRIBUSINESS

Feedlots, plants deep into cost, price troubles

By ROD SMITH
Feedstuffs Staff Editor

The beef cattle markets continued to trade very, very, very slowly last week as packers were deep in the red and not willing to bid and the yards were deep into high input costs from grain and placements last spring and not willing to sell at the lower offers that did come out, according to *Feedstuffs* sources.

Marketings over the first four days last week were 11.1% slower than the year before, and cattle, in light trading in the northern Plains and western Corn Belt last Thursday, were \$83.00-\$83.50/cwt., down \$2-3 from the week before. Feedlots won a standoff and got higher prices two weeks ago, and plants won and got lower prices last week — a loser-winner scenario that's common in industries needing to consolidate more and align production, sources said.

Cattle prices were just 0.9% more than year ago. Feeders, however, indexed nearly 50 cents higher to \$118.75, setting yet another record-high price, 22.9% more than year ago, as feeder supplies continued to tighten.

Beef, as priced in the light Choice cutout, was \$137.27/cwt. last Thursday, down \$2.75 from the week before, down 4.2% from the year before and far into negative territory for the plants. The beef houses are paying more for cattle than they can offset in the box, analysts said. "I've never seen plants at this time of the year operating as red as they are," a long-time observer said.

The cattle run this year through

Thursday totaled 21.263 million head, 10.1% below last year.

A number of reports were important to the beef industry last week. The feedlot inventory report was near-term negative but friendly to the winter marketing period, analysts said, with July marketings and placements the lowest ever for the month in the modern series (Table 1, p. 22).

The marketings number means that feedlots are backing cattle up, with the 120-day-plus inventory 41.9% higher than year ago. The extent to which this will mean heavier marketings of heavier-weight cattle this fall was debatable, as some analysts said the implications are not good but others said the 120-day-plus supply, while over year ago, has actually decreased substantially from earlier this year and is about 33% of what it was last winter.

Darrell Mark, an agriculture economist at the University of Nebraska, noted that the 120-day-plus supply has, in fact, decreased faster than the overall feedlot inventory and said its effect on prices this fall may, therefore, be muted.

At the same time, other sources said the carryover — cattle that were market ready but not marketed — is rising sharply and makes it tough for feedlots to get into the next month on strong ground. Cattle weights are now above last year and the five-year average, and the Choice-Select spread is now under

Feedlots/p. 22

Timeline on border reopening remains murky

By SALLY SCHUFF
Feedstuffs Washington Editor

WASHINGTON, D.C. — The timeline for reopening U.S. beef exports to Japan and for reopening the U.S.-Canadian border to live beef animals from Canada continues to be murky.

Even though top U.S. Department of Agriculture officials had hoped that a series of U.S.-Japanese technical sessions would lead to a high-level agreement in August, that hope faded as the month drew to a close with no announcement.

However, Agriculture Secretary Ann Veneman told reporters Aug. 27: "We are confident that we will continue to make progress in these negotiations toward opening up the market, hopefully very soon."

She reported that based on the three technical exchanges held this summer between the two countries, "We have concluded ... out of those technical discussions that we will move forward with an agreement with the Japanese where they will not require testing of all ages of animals."

However, that agreement apparently requires a regulatory change in Japan to ease the country's current requirement for testing of all beef animals for bovine spongiform encephalopathy (BSE).

Agriculture undersecretary J.B. Penn confirmed to reporters at the same Aug. 27 press call, "The Japanese do have a regulatory process. ... They are, at this time, in the middle of the evaluations

Border/p. 3

China gives import assurance

The Office of the U.S. Trade Representative and the U.S. Department of Agriculture received assurances from China's government that new Chinese import regulations will not interfere with trade in U.S. soybeans and other commodities. Page 3.

Syngenta gets okay

The U.S. Department of Justice last week approved Syngenta's acquisition of Advanta BV, provided Swiss-based Syngenta divests the worldwide sugar beet seed business of Advanta. Page 5.

ISU corn pollen drift research

Final data from an Iowa State University (ISU) research project looking at corn pollen drift support the notion that an effective way to decrease unintended pollination is to use buffer strips of corn. Page 15.

Animal feed leaders

Delegates from the world's largest feed-producing countries met Aug. 5-6 to review and debate key issues that confront the feed- and food-producing industries. Page 16.

Business

Parmalat takes suits to auditors

Parmalat Finanziaria SpA, having already filed lawsuits against its banking partners to recover damages from their involvement in its insolvency, has now sued its auditors and an investment house for their roles. Page 6.

Ag-Bag to be sold

Ag-Bag International Ltd. entered into a purchase agreement to sell substantially all of its assets, including the Ag-Bag name, to Miller-St. Nazianz Inc. of St. Nazianz, Wis. Page 7.

Nutrition & Health

Puppies fed DHA more 'trainable'

New research showed that puppies nourished with enhanced (high) levels of dietary docosahexaenoic acid (DHA) were smarter and easier to train than typical-DHA nourished puppies. Page 9.

Markets

Frost boosts soybean futures

Frost and declining crop conditions helped move soybean futures higher last week, yet those factors did not stop corn markets from declining. Page 21.

Reports positive

The feedlot inventory, Canadian-U.S. cattle inventory and cold storage reports were generally positive for cattle, hogs and poultry last week, but

Voters face two different ag platforms

By SALLY SCHUFF
Feedstuffs Washington Editor

WASHINGTON, D.C. — This year's election remains a face-off between Republican President George Bush and challenger Democrat John Kerry in battleground states that will decide the outcome on Nov. 2.

Many of the battleground states are in the heart of farm and ranch country — where 60% of the vote went to Bush in 2000.

This year, those voters face major differences in the agricultural platforms of the two candidates — and like everywhere else in America, rural voters are divided into two distinct camps.

For instance, the National

Cattlemen's Beef Assn. (NCBA) — for the first time in its more than 100-year history — has endorsed a presidential candidate. That candidate is Bush.

The endorsement and financial support will come from NCBA's political action committee (PAC).

Tanya Augustson, NCBA's Washington spokesperson, said during the organization's recent summer meeting in Denver, Colo., "attendees unanimously agreed that they have never seen a time in history when the policies established by the candidates were so opposite and defining for the future of the beef industry."

NCBA's endorsement was based on policies — not political parties, she said.



Gener Romeu
Director



editorial

Distinguidos lectores,

Como habréis podido comprobar en la portada, en esta edición hemos preparado un especial informativo sobre el Bienestar Animal durante el Transporte. A priori, todo parecía indicar que las nuevas propuestas legislativas sobre este tema se aprobarían a finales de abril, unos días antes de la incorporación de los nuevos países integrantes de la Unión Europea. Pero saltó la sorpresa, y las propuestas del Informe Maat no fueron aceptadas.

En este especial, vamos a recordarles el contenido de dicho informe y el camino recorrido por las instituciones europeas para su aprobación, además de contar con la opinión del director-gerente de una de las organizaciones de nuestro país que más han trabajado para buscar una nueva dirección a estas propuestas.

El especial se completa con la publicación de dos estudios elaborados en España y Francia sobre la problemática del transporte animal —en este caso porcino. En el primero, se ratifica la implicación directa de las condiciones de transporte en el bienestar animal; y el segundo estudio, pone en evidencia algunas de las propuestas de la Unión para la nueva reglamentación.

De momento, parece que no será hasta el próximo año cuando se vuelva a hablar del tema en la Unión Europea, con la incógnita de saber cuál será la postura de los nuevos diez socios. ¿Estarán de acuerdo en las propuestas más cercanas a los países del norte? ¿O se decantarán por la postura de España, Francia o Italia?

No se sabe, lo que quiere decir que en el caso de los países en desacuerdo con las propuestas tan sólo han ganado el primer asalto, pero sin la seguridad que en el próximo tengamos mejor o quizás peor suerte. De momento, este período de tiempo puede servir para continuar preparando la lucha.

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« GESTION DU RISQUE RÉSIDUS EN CULTURE DE LÉGUME »

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« Devoir d'informer »

Les entreprises du secteur des fruits et légumes, quels que soient leurs tailles ou leurs types d'activités sont soumises à des contraintes et des pressions sans cesse plus importantes. Contraintes liées à la performance technique, à l'évolution des produits mais surtout à un marché concurrentiel et un environnement exigeant. Face à cette situation, une solution envisageable est d'optimiser ses connaissances et diminuer le temps de la prise de décision. La maîtrise de l'information économique et son utilisation à bon escient constitue un objectif majeur que tout professionnel doit atteindre. L'information est devenue au fil des années le nerf de la guerre.

Dans cet environnement de compétition intense, l'information permet d'analyser, de décider et d'agir. Elle aide à minimiser les risques mais, également dans la gestion quotidienne, elle offre une vision à plus long terme et anticipe ainsi les changements. Le Ctifl conscient de cet enjeu majeur a su organiser et mettre en place les outils nécessaires pour répondre aux exigences de la filière.

Classiquement, à travers ses ouvrages techniques, ses périodiques, ses centres de documentation. Et, maintenant depuis trois ans, en mettant à la disposition des acteurs de la filière un portail d'informations techniques sur Internet : www.fruits-et-legumes.net. Ce site propose une quinzaine de banque de données techniques, économiques, pratiques et documentaires. Il recense aujourd'hui plusieurs centaines de milliers de références validées et tenues à jour répondant ainsi à la mission d'information. Parallèlement aux bases de données, le Ctifl fournit des outils d'aide à la décision : diagnostic phytosanitaire, aide aux traitements statistiques et outils agro-météorologiques.

Ainsi pour l'avenir, Le Ctifl est prêt à faire évoluer encore ses moyens de diffusion avec les nouvelles technologies d'information et de communication. ■

Jean-François Samie,
chef du département information et diffusion



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Detection of hepatitis C virus NS3 protein in small intestine enterocytes of a chronically infected patient. Formalin-fixed and paraffin-embedded small intestinal biopsies from an HCV chronically infected patient were stained with an anti-NS3 mAb. Positive staining was observed in epithelial cells predominantly in the crypts of the jejunum, whilst the mucus-secreting cells were unlabelled. Image provided by Patrice André, INSERM, Lyon, France. See the article by Deforges *et al.* in this issue, pp. 2515-2523.

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**A FONDO**

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Pipeline profits from 100 feeds per day

The sensor system refills with liquid feed each time the trough is emptied ensuring uniform feed consumption for all, even with 50 or more pigs in each pen.



27 A la carte menu for pigs

Very popular in the Netherlands and in Belgium, the multiphase feeding concept is also being developed in other countries, such as France where it can help farmers to manage environmental issues.

11 COUNTRY

Growing potential for the Chinese pig industry

A BPEX delegation went out to China to explore the possibilities for future British pork exports, and believe the country represents both challenges and opportunities for the major pig-producing countries in the West.



17 HOUSING

Looking back on 20 years of feed and climate systems

Over the last 20 years the housing and equipment industry for pigs has gone through some major changes. More accurate ventilation systems for better climate control, the introduction of fully automated feeding systems and group housing of sows are some of the major developments according to international companies.



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New products, business news and people on the move

The first VIV Russia met with success as exhibitors and visitors alike praised the organisers for taking the initia-

tive to give the intensive livestock sector in this fascinating region of the world its own event focused on technology. The May 2004 timing certainly appears to have been opportune with several pig industry experts feeling that there have been dramatic changes over the last 12 months, mainly stimulated by land privatisation, two very good grain harvests before 2003 and the introduction of import quotas for pig meat. It was said, 'Agriculture has become more attractive to some of the larger investors'.

There are also ambitious targets being set. In an interview with the Association of Russian Swine Raising Farms, a programme to double the domestic production of pig meat by 2010 was outlined. Their success is realised to depend on the national economy and credit arrangements to stimulate further investment. As a coincidence, President Vladimir Putin gave his state of the nation address in the Kremlin on 26 May, the second day of VIV's 3-day event. According to a report in the Moscow Times, Putin reiterated his promise to double the wealth of the nation as a whole and improve the living standards of its individual citizens. He was quoted as saying, "Last year the economy grew by 7.3% and in the first four months of this year, growth hit 8%. If we maintain such rates we are fully capable of doubling GDP per capita, not in 10 years, but by 2010."

Be that as it may, time can be difficult to judge in Russia. A newcomer learns quickly that minutes can roll into hours from the moment you begin queuing to pass through passport control at Moscow airport to attempts to travel from one destination to another. Frustration soon turns into fascination, however, as the time taken out of your control is spent catching glimpses of impressive buildings and monuments, neighbourhood extremes, six lane traffic-jams and police control points. Overwhelming, but an experience to relish!

Anabel Evans, editor, Pig Progress

Editorial





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Society

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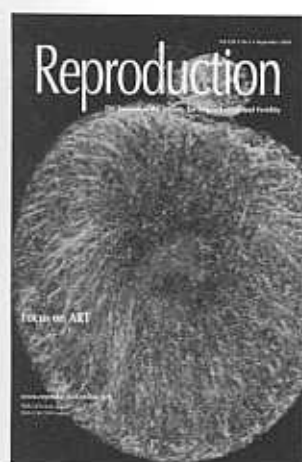
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September 2004

Volume 128

Part 3

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Cover shows a SEM of cytoplasmic microtubules in an activated human oocyte without second polar body abstriction or spindle formation (anti MT and DAPI).

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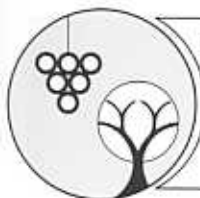
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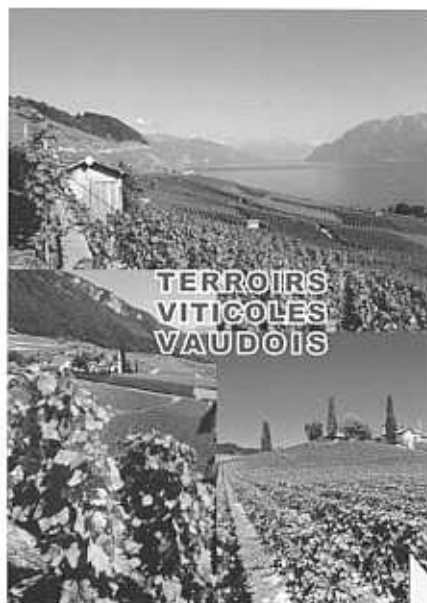


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Une étude des terroirs viticoles a pu être réalisée de 2000 à 2004 sur l'ensemble du vignoble vaudois. Elle a permis de cartographier les sols et le climat et de valider les méthodes utilisées par l'analyse du comportement de la plante.

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COVER A child being given oral polio vaccine in the Democratic Republic of the Congo in 2001. A special news report beginning on page 1960 explores the challenges, setbacks, and successes of the campaign to eradicate polio, now entering its 16th year with a new goal: halting transmission of the wild poliovirus in 2004. [Photo: Sebastiao Salgado]

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In a test-tube reconstitution of natural exocytosis, lipid vesicles fuse in the presence of calcium when two types of synaptic proteins are included in the mix.

GENETICS: Complete Genome Sequence of the Apicomplexan, *Cryptosporidium parvum*

M. S. Abrahamsen, T. J. Templeton, S. Enomoto, J. E. Abrahante, G. Zhu, C. A. Lancto, M. Deng, C. Liu, G. Widmer, S. Tzipori, G. A. Buck, P. Xu, A. T. Bankier, P. H. Dear, B. A. Konfortov, H. F. Spriggs, L. Iyer, V. Anantharaman, L. Aravind, V. Kapur

The intestinal parasite *Cryptosporidium parvum* lacks several common biochemical pathways and intracellular organelles and thus must rely on its host for nutrients.

NEUROSCIENCE: Axonal Neuregulin-1 Regulates Myelin Sheath Thickness

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A neuronal factor directs adjacent nonneural cells to spin just the right amount of insulating membrane around the axon.

PHYSICS: Tunable Nonlocal Spin Control in a Coupled-Quantum Dot System

N. J. Craig, J. M. Taylor, E. A. Lester, C. M. Marcus, M. P. Hanson, A. C. Gossard

Adjustment of the number of electrons on one quantum dot can control the conductance of a second, remotely located one, providing a way to transmit quantum information.

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1977 DEVELOPMENTAL BIOLOGY

Comment on "Reelin Promotes Peripheral Synapse Elimination and Maturation"

C. Bidoia, T. Misgeld, E. Weinzierl, M. Buffelli, G. Feng, A. Cangiano, J. W. Lichtman, J. R. Sanes

full text at www.sciencemag.org/cgi/content/full/303/5666/1977b

Response to Comment on "Reelin Promotes Peripheral Synapse Elimination and Maturation"

G. D'Arcangelo full text at www.sciencemag.org/cgi/content/full/303/5666/1977c

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1989 ECOLOGY: Host Plant Specialization Governed by Facultative Symbiont

T. Tsuchida, R. Koga, T. Fukatsu

A Japanese aphid's choice of host plant for reproduction is not controlled genetically but depends on whether the aphid is infected with an endosymbiotic bacterium.

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1990 ASTRONOMY: Discovery of a Large Dust Disk Around the Nearby Star AU Microscopii

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A young star, representative of most stars in the Universe, is surrounded by a diffuse dusty disk and can be compared with a nearby star formed at the same time that has planets in its more aggregated disk. *related Perspective page 1982*

1992 PHYSICS: Deterministic Generation of Single Photons from One Atom Trapped in a Cavity

J. McKeever, A. Boca, A. D. Boozer, R. Miller, J. R. Buck, A. Kuzmich, H. J. Kimble

A single cesium atom trapped in a cavity reliably yields single photons on demand, useful for quantum communication.

1995 PHYSICS: Local Ordering in the Pseudogap State of the High- T_c Superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$

M. Vershinin, S. Misra, S. Ono, Y. Abe, Y. Ando, A. Yazdani

Scanning probe microscopy reveals how electrons order in the presuperconducting state of cuprate high-temperature superconductors. *related Perspective page 1985*

1998 PHYSICS: Quantum Optimally Controlled Transition Landscapes

H. A. Rabitz, M. M. Hsieh, C. M. Rosenthal

A general explanation derived from the basic equations of quantum mechanics shows why control of quantum systems has been possible across many experiments and simulations.

2001 MATERIALS SCIENCE: Atomic-Resolution Measurement of Oxygen Concentration in Oxide Materials

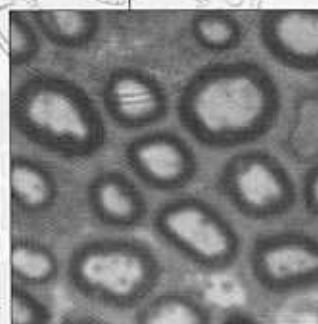
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A modification of transmission electron microscopy reveals how the distribution of oxygen atoms and vacancies could affect the electronic properties on the surface of a ceramic.

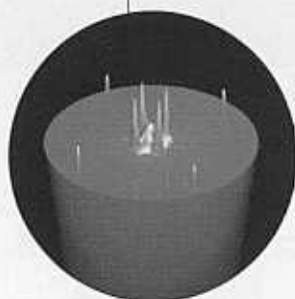
2004 GEOCHEMISTRY: Oxygen Isotope Constraints on the Sulfur Cycle over the Past 10 Million Years

A. V. Turchyn and D. P. Schrag

Oxygen isotopes in marine barite (BaSO_4) imply that the sulfate concentration of the ocean fluctuated with sea level changes and increased over the past 10 million years. *related Perspective page 1987*



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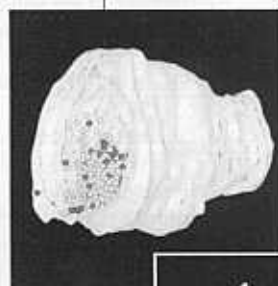
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A protein that nucleates actin filaments moves through the cell by surfing along with the growing actin tip, without requiring molecular motors.
- 2011 MOLECULAR BIOLOGY: Stress-Dependent Regulation of FOXO Transcription Factors by the SIRT1 Deacetylase**
A. Brunet, L. B. Sweeney, J. F. Sturgill, K. F. Chua, P. L. Greer, Y. Lin, H. Tran, S. E. Ross, R. Mostoslavsky, H. Y. Cohen, L. S. Hu, H.-L. Cheng, M. P. Jedrychowski, S. P. Gygi, D. A. Sinclair, F. W. Alt, M. E. Greenberg
Deacetylation of a transcription factor by another protein known to deacetylate histones provides a potential explanation of how these two molecules exert their effects on longevity.
- 2016 DEVELOPMENTAL BIOLOGY: Nanos Maintains Germline Stem Cell Self-Renewal by Preventing Differentiation**
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A protein that represses translation of messenger RNA is required for germline stem cells to generate identical copies.
- 2019 VIROLOGY: Envelope-Constrained Neutralization-Sensitive HIV-1 After Heterosexual Transmission**
C. A. Derdeyn, J. M. Decker, F. Bibollet-Ruche, J. L. Mokili, M. Muldoon, S. A. Denham, M. L. Heil, F. Kasolo, R. Musonda, B. H. Hahn, G. M. Shaw, B. T. Korber, S. Allen, E. Hunter
Although infected patients typically harbor numerous strains of HIV, they transmit to heterosexual partners only a single strain that has a particular type of surface protein and a sensitivity to antibodies. *related News story page 1956*
- 2022 PLANT SCIENCE: A MicroRNA as a Translational Repressor of APETALA2 in Arabidopsis Flower Development**
X. Chen
A small RNA regulates the formation of flowers by repressing the translation of messenger RNA into protein rather than by the more usual means of directing RNA destruction.
- 2026 STRUCTURAL BIOLOGY: Structure-Based Assembly of Protein Complexes in Yeast**
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Atomic structures of 46 yeast protein complexes are resolved by fitting known structures of proteins or their homologs into the envelope defined by electron microscopy of the complexes.
- 2030 PARASITOLOGY: Effects of Mosquito Genes on Plasmodium Development**
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- 2033 NEUROSCIENCE: G Protein-Coupled Receptor-Dependent Development of Human Frontal Cortex**
X. Piao, R. S. Hill, A. Bodell, B. S. Chang, L. Basel-Vanagaite, R. Straussberg, W. B. Dobyns, B. Qasrawi, R. M. Winter, A. M. Innes, T. Voit, M. E. Ross, J. L. Michaud, J.-C. Descarie, A. J. Barkovich, C. A. Walsh
The frontal cortex, associated with higher order thinking in humans, develops abnormally when a gene for an evolutionarily labile membrane receptor is mutated. *related Perspective page 1983*
- 2037 NEUROSCIENCE: The Structural Organization of the Readily Releasable Pool of Synaptic Vesicles**
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Contrary to conventional wisdom, synaptic vesicles that are released first are randomly distributed within the nerve terminal and not necessarily the ones closest to the release site. *related Perspective page 1996*
- 2040 NEUROSCIENCE: Uniform Inhibition of Dopamine Neurons in the Ventral Tegmental Area by Aversive Stimuli**
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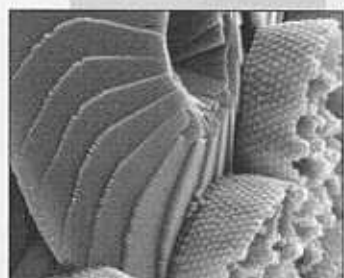
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NEUROSCIENCE: Distinct Ensemble Codes in Hippocampal Areas CA3 and CA1

S. Leutgeb, J. K. Leutgeb, A. Treves, M.-B. Moser, E. I. Moser

In rats, one section of the hippocampus codes for individual aspects of physical spaces, while another reacts to common features, a distinction that is reflected by different information processing capacities.

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509 ECOLOGY: Ecosystem Properties and Forest Decline in Contrasting Long-Term Chronosequences

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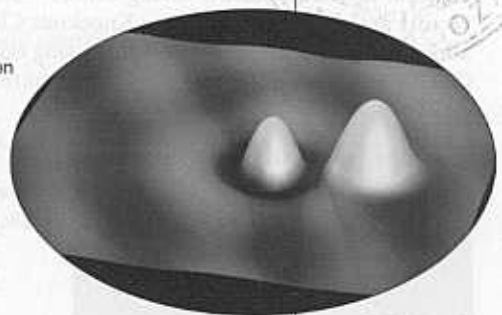
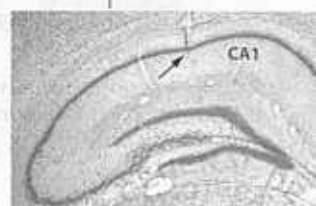
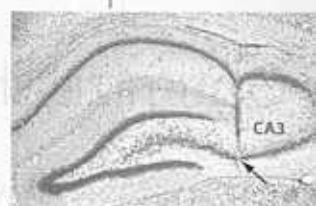
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516 CELL BIOLOGY: Phosphorylation by Cyclin B-Cdk Underlies Release of Mitotic Exit Activator Cdc14 from the Nucleolus

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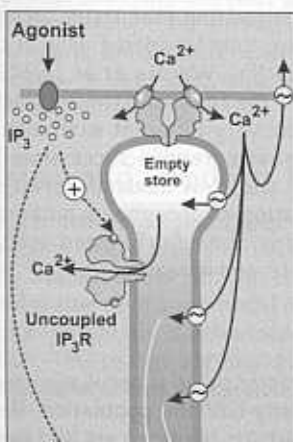
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TESTING HUMAN LIMITS

Next month, athletes from around the world will meet in Athens to push the limits of human performance in a variety of contests. This special section, with associated online material, explores the physiology, technology, and in some cases pharmacology that lie behind athletic feats. [Image: The Image Bank/Getty]

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A former student of the American Sports Medicine Institute came all the way from Australia to learn about the biomechanics of baseball.

GLOBAL/US: My Journey Out From Under the Stairs *S. Seiler*

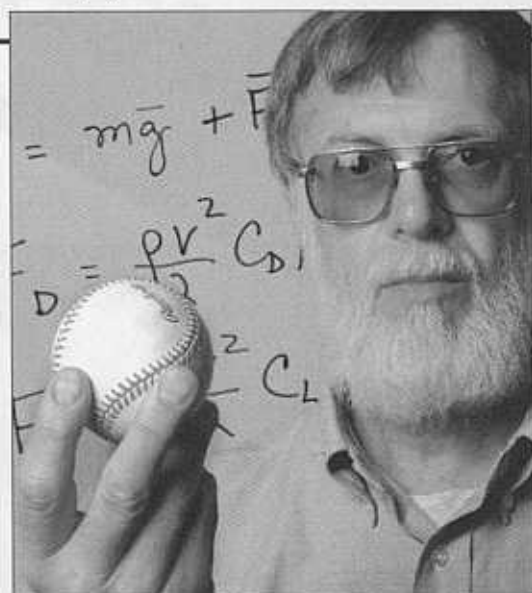
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GLOBAL/EUROPE: Keeping Your Finger on the Pulse—Sports Science in Europe *E. Pain*

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SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

PERSPECTIVE: Designer Androgens in Sport—When Too Much Is Never Enough *D. J. Handelsman*

Does anyone know the signaling properties of "designer" steroids?

REVIEW: Molecular and Cellular Determinants of Skeletal Muscle Atrophy and Hypertrophy *V. Sartorelli and M. Fulco*

IGF-1 is a crucial regulator of muscle mass.

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NEWS SYNTHESIS: Growing Pains *R. J. Davenport*

As researchers sort through the hype surrounding growth hormone, they hope to uncover the molecule's actual benefits.

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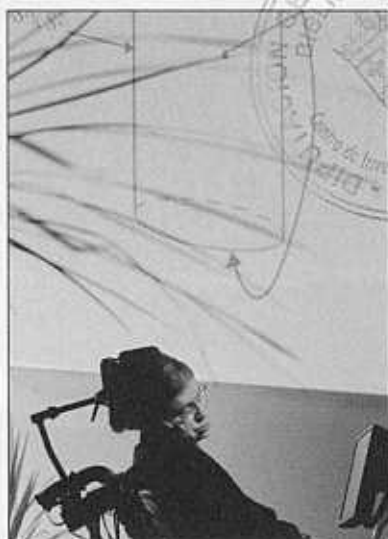
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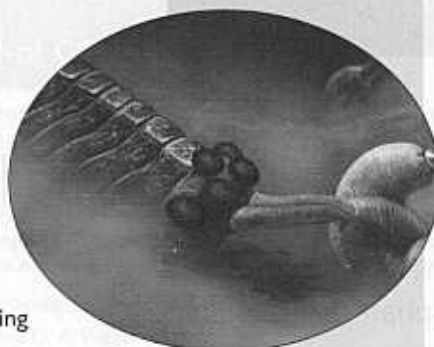
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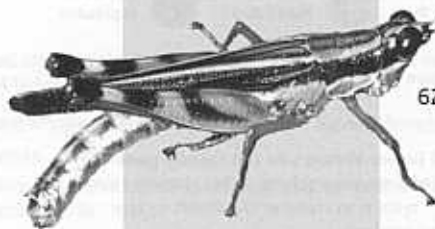
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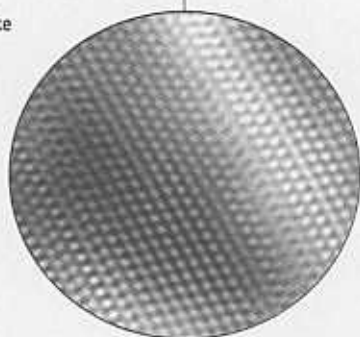
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Before it was ejected from a small crater in the Lalande area of the Moon, a lunar meteorite experienced three impact events over nearly 4 billion years. *related Perspective page 622*

660 GEOPHYSICS: Foundering Lithosphere Imaged Beneath the Southern Sierra Nevada, California, USA

O. S. Boyd, C. H. Jones, A. F. Sheehan

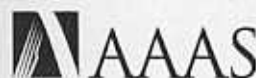
Seismic imaging reveals that a piece of layered, dense lower crust may be delaminating and dropping into the mantle deep beneath the Sierra Nevada.



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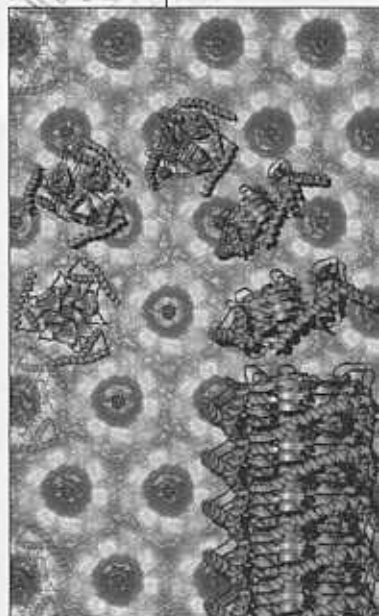
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More Muscle for Dysrophic Mice

Researchers make blood vessels leaky to deliver therapeutic genes.

Monster Waves Rule the Seas

Satellite survey reveals abundance of 25-meter-high waves.

Birds in the Fast Lane

Homing pigeons use highways to guide themselves home.



Pigeons follow roads.

science's sage ke www.sageke.org SCIENCE OF AGING KNOWLEDGE ENVIRONMENT

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Baisse de la collecte de lait de vache au mois de juin 2004 dans l'EU-25

Statistiques en bref

AGRICULTURE ET PECHE

22/2004

Auteurs
Agostino Angelini,
Alain Bisval

Contenu

Collecte de lait de vache
par les laiteries EU-25

Juin 2004

Attention : les données présentées ci-après concernent « la collecte » de lait de vache par les laiteries auprès des exploitations agricoles et non « la production » de lait de vache dans les exploitations agricoles.

Situation mensuelle

Dans les pays de l'Union européenne, l'observation de la collecte de lait de vache en juin 2004 permet de constater (en données corrigées) une baisse de l'ordre de 3,7 % EU-15 et 2,6 % EU-25 (sans Chypre et Malte) par rapport au mois précédent.

La réduction de la collecte est importante. En effet, si le mois de juin amorce traditionnellement une diminution de la collecte, cette année elle est supérieure à la normale. Plusieurs facteurs peuvent être évoqués pour expliquer la situation. Le premier pourrait être une décapitalisation des cheptels laitiers à la suite des difficultés provoqués par la canicule qui a sévi en 2003 (voir SIF mai 2004). Un autre, plus conjoncturel, serait lié à l'évolution défavorable des prix des produits laitiers.

La comparaison entre juin 2004 et juin 2003 confirme la tendance à la baisse : -1,4 % (les calculs se réfèrent aux pays dont les données sont disponibles).

Le cumul du premier trimestre de la campagne laitière en cours, comparé à la même période de la dernière campagne, affiche une évolution négative (-2,2% EU-15).

Evolution de la collecte de lait de vache par les laiteries

	Collecte de lait de vache par les laiteries 1000 t													Taux de variation (%)	
	Jul 2003	Jul 2003	Aoû 2003	Sep 2003	Oct 2003	Nov 2003	Déc 2003	Jan 2004	Fév 2004	Mar 2004	Avr 2004	Mai 2004	Jui 2004	Jui 2004 / Mai 2004 ⁽¹⁾	Jui 2004 / Jui 2003
	2003	2003	2003	2003	2003	2003	2003	2004	2004	2004	2004	2004	2004		
BE	246.4	237.1	218.2	219.4	224.2	211.0	236.2	238.7	220.3	240.9	254.1	254.3	242.5	-1.5	-1.5
CZ	-	-	-	-	-	-	-	210.4	210.4	220.0	213.3	224.2	220.5	1.6	-
DK	387.6	387.5	384.4	367.8	369.6	355.1	373.4	374.0	349.3	365.5	371.8	391.6	374.2	-1.3	-3.5
DE	2327.8	2354.0	2270.1	2187.9	2219.0	2120.6	2252.7	2291.8	2156.1	2277.1	2317.9	2437.0	2319.3	-1.7	-0.4
EE	48.3	47.5	44.9	39.7	35.9	34.4	37.1	38.2	39.2	43.7	46.8	50.0	50.3	4.0	4.1
EL	57.4	59.7	58.5	55.9	54.2	50.2	52.4	42.0	47.2	51.1	53.7	60.8	58.1	-1.3	1.1
ES	512.1	512.1	492.4	475.7	477.2	461.7	484.1	485.0	463.5	516.5	497.8	535.1	497.7	-3.9	-2.8
FR	1844.1	1782.2	1655.5	1677.8	1858.2	1848.7	1995.2	2031.7	1905.6	1949.1	2137.4	2152.4	1855.3	-10.9	-4.6
IE	675.8	653.3	589.6	498.4	427.3	268.1	167.8	132.8	205.1	383.1	620.6	730.2	694.9	-1.7	2.8
IT	852.3	882.9	818.7	808.3	815.2	801.5	815.6	851.9	824.0	909.3	896.7	897.6	897.9	3.4	5.4
CY	12.3	13.0	12.9	12.5	12.6	12.1	12.5	12.1	11.3	12.5	11.8	11.5	-	-	-
LV	-	-	-	-	-	-	-	28.4	26.4	29.7	32.8	42.5	50.5	22.8	-
LT	110.2	115.2	119.2	111.2	95.7	68.1	68.7	64.9	60.1	66.6	72.8	97.4	118.4	25.6	7.4
LU	22.6	22.0	20.3	19.8	20.0	19.5	21.4	22.2	20.9	22.1	22.3	23.7	22.1	-3.5	-2.2
HU	137.7	139.8	133.0	125.7	122.9	117.1	122.0	130.3	124.6	132.4	129.2	133.9	127.3	-1.7	-7.5
MT	3.4	3.4	3.3	3.2	3.2	3.1	3.2	3.3	3.2	3.3	3.2	3.5	-	-	-
NL	886.8	908.9	882.4	877.7	891.6	834.0	883.6	885.4	808.0	840.9	885.0	910.2	872.8	-0.9	-1.6
AT	228.0	231.0	220.0	209.0	212.0	199.0	214.0	222.0	212.0	228.0	232.0	251.0	228.0	-6.1	0.0
PL	-	-	-	-	-	-	-	-	-	-	-	762.8	774.4	4.9	-
PT	166.7	162.4	146.7	139.0	138.6	133.8	143.9	149.2	145.1	165.3	169.1	177.7	162.1	-9.7	-2.9
SI	-	-	-	-	-	-	-	42.4	40.7	44.1	43.3	45.7	43.8	-0.9	-
SK	86.4	86.2	82.9	77.6	76.6	71.2	75.7	76.3	72.4	78.7	80.4	86.8	82.3	-1.9	-4.7
FI	203.6	203.7	196.6	188.3	190.1	189.0	202.1	208.5	198.1	211.7	206.8	212.1	201.1	-2.0	-1.2
SE	270.2	266.1	265.9	254.7	256.5	251.5	267.9	276.0	263.6	286.1	281.0	286.0	273.3	-1.9	1.1
UK	1303.8	1288.7	1215.7	1133.8	1148.9	1102.8	1180.3	1160.6	1084.8	1185.8	1244.8	1344.1	1243.4	-4.4	-4.6
EU-25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EU-15	10065.1	9911.8	9434.9	9113.7	9302.5	8944.5	9260.4	9371.5	8903.3	9642.7	10190.8	10665.9	9942.7	-3.7	-1.4

Les données de la Belgique sont estimées de mars 2004 à juin 2004.

La donnée de la Grèce est estimée par Eurostat pour juin 2004.

⁽¹⁾ Données corrigées = production mensuelle / nombre de jours du mois x (366/12)

(Graphique à la page suivante)

Source de données : Eurostat New Cronos 19/08/2004.



eurostat



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Premiers résultats de la collecte de données démographiques pour 2003 en Europe

Collecte commune de données démographiques Conseil de l'Europe/Eurostat

La présente publication fournit des informations démographiques de base pour 2003, y compris des statistiques pour l'Union européenne élargie. Les informations concernant les 10 nouveaux pays apparaissent précédemment dans la sous-section «*Autres États membres du Conseil de l'Europe*». Compte tenu du calendrier pour le retour du questionnaire rapide, certains chiffres sont provisoires ou estimés. Des informations supplémentaires et/ou plus définitives seront publiées dans les prochains rapports annuels du Conseil de l'Europe («*Évolution démographique récente en Europe 2004*») et d'Eurostat («*Statistiques démographiques 2004*»).

Principales tendances démographiques pour 2003

Certains chiffres concernant la population au 1.1.2003 ont été révisés pour tenir compte d'informations censitaires complémentaires et diffèrent de ceux publiés en 2003 dans la *Statistiques en bref* n°20/2003. La plupart des révisions sont mineures, à l'exception de celles concernant l'Espagne et, dans une moindre mesure, l'Italie et le Royaume-Uni (à la hausse dans chaque cas). Les tableaux 1 et 2 montrent que la population de l'UE élargie aurait augmenté de 1,9 million d'habitants ou 0,4% en 2003, pour atteindre 456,4 millions d'habitants au 1.1.2004. Un habitant de la planète sur 14 vit aujourd'hui dans l'UE. Cette augmentation de la population est due presque entièrement (90%) au solde migratoire, dont les deux tiers, soit 1,1 million de personnes, sont imputables à l'Espagne (le chiffre le plus élevé de l'UE) et à l'Italie. Dans ce dernier pays toutefois, le solde migratoire est artificiellement élevé car il inclut la régularisation de la situation d'un grand nombre d'étrangers, un certain nombre de personnes comptabilisées dans les flux indiqués dans les tableaux 1 et 2 pouvant ainsi être arrivées en Italie avant 2003. En 2003, le taux de décroissance naturelle le plus élevé a été enregistré en Ukraine, avec -7,5‰. Par contraste, le taux d'accroissement naturel a été relativement élevé en Turquie (13,9‰) ainsi qu'en Irlande et en Islande (8,2‰ et 8,0‰).

Le tableau 3 montre certaines augmentations notables de l'indicateur conjoncturel de fécondité (ICF), en particulier pour la Suède, de 1,65 en 2002 à 1,71 en 2003 (il était de 1,57 en 2001), pour le Royaume-Uni, de 1,64 en 2002 à 1,71 en 2003 et pour la Lettonie, de 1,23 en 2002 à 1,29 en 2003. Ces augmentations ont été contrebalancées par de légères diminutions dans d'autres pays de l'UE qui se soldent par une faible augmentation de l'ICF pour l'ensemble de l'UE (de 1,46 en 2002 à 1,48 en 2003). L'ICF le plus faible a été observé en Ukraine (1,05) et le plus élevé en Turquie (2,43). Par comparaison, l'ICF des États-Unis était de 2,07. Le tableau 3 montre aussi que la proportion de naissances hors mariage continue d'augmenter virtuellement partout: elles représentent actuellement 3 naissances sur 10 dans l'UE contre 1 sur 10, il y a vingt ans.

Les taux de mortalité infantile les plus élevés ont été enregistrés dans plusieurs des nouveaux pays d'Europe centrale et orientale (par exemple: 9,4 décès de nouveau-nés pour 1000 naissances vivantes en Lettonie). La République tchèque (3,9) et la Slovénie (4,0) ont fait exception. Par conséquent, le taux de mortalité infantile en 2003 pour l'UE élargie (4,6) était légèrement supérieur à celui de 2002 pour les 15 pays qui composaient alors l'Union européenne (4,5). La Suède avait de nouveau le taux le plus faible (2,8). Pour plus de détails, voir le tableau 4. Sur la base des taux de mortalité actuels, le tableau 4 montre également que, dans l'UE, l'espérance de vie moyenne à la naissance varie, pour les hommes, de 65 à 66 ans dans les États baltes (Estonie, Lettonie et Lituanie) à 78 ans en Suède et, pour les femmes, de 77 à 78 ans dans les États baltes, en Slovaquie et en Hongrie à 84 ans en Espagne. Par contraste, l'espérance de vie à la naissance des hommes reste inférieure à 60 ans en Russie.

Le tableau 5 illustre, de manière générale, les tendances différentes en matière de mariage et de divorce, le nombre de mariages diminuant tandis que celui des divorces augmente. Par exemple, dans l'UE, il y a eu 2,17 millions de mariages en 2003 contre 2,20 millions en 2002. Par contraste, il y a eu 889 000 divorces en 2002 contre 851 000 en 2001. Le taux brut de nuptialité le plus élevé a été observé à Chypre et le taux brut de divortialité le plus élevé en Russie.

Statistiques en bref

POPULATION ET CONDITIONS SOCIALES

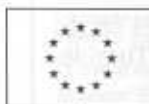
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Agra Europe

weekly

23 SET. 2004

No. 2123

September 17, 2004

Highlights

- New Commissioner sets out priorities
- Fischler fears rural aid budget cuts
- Byrne warns of animal disease threat
- No cuts in 2004/05 EU sugar quotas
- More work needed on WTO talks
- EU tariff threat to Caribbean growers
- World grain harvest estimates rise further
- Farm aid accessibility criticised

Fischer Boel sets out priorities for new term of office

Reform of the EU sugar regime, simplification of the market regime for fruit and vegetables, and a possible reform of the wine sector are all high on the list of priorities for Mariann Fischer Boel, the nominee EU agriculture Commissioner.

These were among the objectives set out by Fischer Boel in her answers to MEPs' written questions on her vision of the future CAP, which were released on Thursday.

The written responses preceded her investiture hearing with the Parliament's agriculture committee, which is set for October 6, and which will be a decisive step in establishing her credentials in the EU's only directly-elected body.

Budget ceiling impact

Fischler's reforms backed

Fischer Boel defended the achievements of present Commissioner Franz Fischler in reforming EU farm policy and in charting a new course for a more market-oriented system, in which rural development aid will feature ever more prominently.

She noted that the accession of Bulgaria, Romania and Croatia would also occupy much of the Commission's time in the coming years, along with trade talks at the World Trade Organisation (WTO) and possibly with the Mercosur group of South American countries

(Brazil, Paraguay, Uruguay and Argentina).

A tentative deadline of October 31 has been set for the conclusion of talks with Mercosur, but this might well be missed, in which case the new Commission would inherit the negotiation.

Asked if she saw a risk of re-nationalisation of the CAP market support policy because of budget limits laid down by EU leaders in 2002, she replied: "I do not believe that the budget ceiling decided at the Summit in October 2002 will lead to a progressive re-nationalisation of the CAP. No matter what implementation system is chosen by the member state, average support cannot progressively diverge between member states."

Meanwhile, Fischer Boel revealed Commission estimates which suggest that Single Farm Payment cheques will probably have to be scaled down by almost €1 billion per year by 2013, as a result of the financial discipline arrangements.

"The Brussels ceilings risk being exceeded as from 2007 by around
(Continued on page EP/2)

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Agricultural Research

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- 23....Science Update

Cover: Genetic engineering (the process of manipulating or inserting genes in an organism) is being used on more and more crops. The crops or products represented here have either already been genetically engineered or are involved in ongoing or planned transgenic studies. The story on page 4 looks at how ARS is helping ensure that transgenic organisms are safe for the environment and the consumer. Photo by Stephen Ausmus. (K11432-1)

In the next issue!

- **HELP FOR HONEY BEES**—*Varroa* mites—the bane of a honey bee's existence—may be in for a deadly surprise. ARS scientists have identified a fungal strain that is lethal to the mites but harmless to the bees. This is good news to beekeepers, who need alternatives to chemicals that face potential bans.
- **CLOBBERING CAMPYLOBACTER**—It's a bacterium that can lurk in that pinkish juice that drips from packages of uncooked chicken. And if you ingest it, you could be in for a serious case of food poisoning. By decoding the microbe's genes, ARS researchers may be able to detect the bug before it catches you and makes you sick.
- **GO AWAY, GRASSHOPPERS**—Grasshoppers have their good side: They're food for birds and other wildlife. But in the West, at times their numbers swell into the hundreds of millions, and they munch up valuable vegetation. ARS scientists are looking for ways to curb the hordes of hoppers, including grazing strategies and controlled fires.

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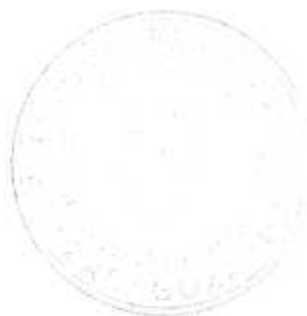
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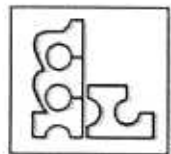
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Front cover: Top: AUS-MEAT chips used to visually assess marbling score (from AUS-MEAT marble score 1 to AUS-MEAT marble score 6). Bottom: Visual scoring of the amount of marbling in a beef muscle using the AUS-MEAT chips. Photographs supplied by AUS-MEAT Limited.



CEREALES

COSECHA DEL 88

El ministerio de Agricultura ha elevado un 5% se anterior avance de cosecha de cereales de otoño-invierno, situándola ahora en 18,8 millones de toneladas frente a los 17,9 de un mes atrás. Se acredita así la mejor cosecha desde 1988, con la siguiente serie histórica:

1986	12,5	1995	8,6
1987	16,4	1996	17,8
1988	19,5	1997	14,0
1989	15,8	1998	17,2
1990	15,0	1999	13,7
1991	15,5	2000	16,7
1992	11,1	2001	12,1
1993	15,5	2002	16,3
1994	12,5	2003	16,1

Datos en millones de tn.

La estadística por productos y la comparación con el avance precedente es la del cuadro inferior.

El mercado, con el maíz siempre marcando las pautas de comportamiento estacional, pasa por otra semana de cotizaciones a la baja, entre las que no deja de sorprender el sostenimiento nominal de la cebada.

* **Maíz:** Los pocos trabajos de recolección que se han podido hacer por ahora en la zona confirman las buenas expectativas de los rendimientos, que en el ámbito más inmediato de la lonja se evalúan un 10-15 por ciento por encima del año pasado. El ministerio de Agricultura ha difundido esta semana sus nuevas estimaciones oficiales de cosecha que, siempre rezagadas, correspon-

(Pasa a la página 14)

AVANCE DE PRODUCCIONES DE CEREALES A 1 DE JULIO. (Miles de tn)

Fuente: MAPA

	2002	2003	01-06-04	01-07-04	04%03
Trigo (total)	6.782,9	6.290,1	6.784,6	7.227,2	+14,9%
Blando	4.709,7	4.041,3	4.254,8	4.381,1	+8,4%
Duro	2.073,2	2.248,8	2.529,8	2.846,0	+26,6%
Cebada (total)	8.332,9	8.698,4	9.821,7	10.262,6	+18,0%
Seis carreras	1.943,8	2.022,3	2.372,8	2.562,7	+26,7%
Dos carreras	6.389,1	6.676,1	7.448,9	7.699,8	+15,3%
Avena	916,0	873,4	1.029,9	1.032,2	+18,2%
Centeno	173,9	184,4	182,7	178,5	-3,2%
Triticale	89,3	87,6	87,1	77,3	-11,7%
TOTAL	16.295,0	16.133,9	17.906,0	18.777,8	+16,4%
Maíz	4.463,4	4.338,7	4.735,9	4.641,9	+7,0%
Sorgo	33,4	29,1	--	32,2	+10,6%

ALIMENTACIÓN

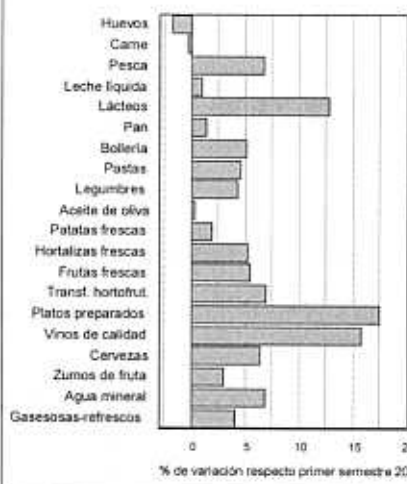
CONSUMO DESCARNADO

El consumo español de carnes volvió a descender en el primer semestre del 2004 un -0,2% con respecto al mismo período del año pasado, confirmando el estancamiento con tendencia regresiva del 2003, cuando ya cayó un -0,8% a lo largo del año. Según los últimos paneles elaborados por el ministerio de Agricultura, el consumo cárnico sigue en conjunto en lenta regresión, al no poder contrarrestarse la caída persistente de las carnes de porcino, pollo, transformados y carnes congeladas con la sola recuperación del vacuno, siempre en progresión desde que dejó atrás su crisis de las vacas locas.

Los platos preparados (+17,5%), los vinos de calidad (+15,8%), los derivados lácteos (+12,8%), la bollería y chocolatería (+8,6%), las frutas y horti-

(Pasa a la página 9)

LAS TENDENCIAS DEL CONSUMO ALIMENTARIO
Cantidades consumidas en España en el primer semestre 2004



PORCINO

GUERRAS DE DESGASTE

La cotización del cerdo cebado de esta semana ha vuelto a bajar -1 céntimo, después de los -2,2 de la precedente, y los +2,2 de la anterior. La negociación del precio, es un desgaste entre las partes.

En la antesala del último trimestre del año, el matadero deshoja las semanas que quedan para el final del ejercicio y concluye que no debe cesar de insistir en esa erosión del precio de compra del cerdo para poder lucir un poco su cierre contable. El estancamiento

contra pronóstico esta semana de la cotización alemana ha reforzado esa posición, a la que desde el lado de la compra no le faltan cerdos, mientras desde el lado de la venta no se vislumbra aún salida para el problema cárnico que capitalizan jamones y lomos.

La saturación de oferta de jamón es una bola de nieve que se ha visto venir de lejos por su acumulación de stock, pero el atasco con los lomos es algo con lo que este verano se sorprenden hasta los más introducidos en este subsector; la incorporación de la demanda de los países del Este ha abierto mercado y activado matanzas para las piezas grasas, pero las partes de más valor que las acompañan en la canal no tienen destino.

Desde la granja, la visión del mercado es resignada: la producción interior de ganado no se proyecta hacia fin de año con los claros y vacíos de otros países europeos; más bien al contrario, demuestra una poblada disponibilidad de cerdos, y la prioridad del ganadero sigue siendo fidelizar la regularidad de compra del matadero. En este sentido, ha vuelto a ser comentada en los ambientes de la lonja alguna operación por debajo de mercado que,

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PORTADA: Son conocidos los antagonismos y sinergias entre elementos minerales. Corregir las carencias de oligoelementos necesarios para el desarrollo de las plantas, mejora los rendimientos, la calidad de la producción y resistencia de las plantas.



NO OLVIDEMOS A LOS OLIGOELEMENTOS

Personas como Francis Chaubousson, francés, o William Albrecht, americano, o bien Werner Bergmann, alemán, apenas si son conocidos por algunos expertos. Pero ellos están unidos por un interés común, el referente a los conocimientos sobre oligoelementos. Si sus libros están agotados, su contenido sigue siendo de actualidad. Todos nos advierten de que una nutrición equilibrada permite resolver numerosas disfunciones en vegetales y también en animales.

Los efectos de las carencias, de oligoelementos, se pueden apreciar antes de que aparezcan los síntomas. Detectar estas carencias por análisis foliar resulta a menudo demasiado tardío y limita las posibilidades de intervención. Las sinergias y los antagonismos entre elementos minerales, así como los contenidos que provocan carencias o toxicidades, las influencias de las modalidades de cultivo, de la materia orgánica, del pH y del clima, complican la interpretación de los resultados. Lo mismo ocurre con los análisis del suelo, pero al menos éstos pueden servir de prevención. Siempre que se pueda, el equilibrio se ha de establecer en la base, en el suelo para los vegetales, a fin de evitar intervenciones costosas. *Rainer Maché*

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GOBIERNO DE CANARIAS
CONSEJERÍA DE AGRICULTURA, GANADERÍA,
PESCA Y ALIMENTACIÓN

SECTORES CON FUTURO

La ganadería es un sector vinculado al Archipiélago desde tiempos remotos, con subsectores como el caprino o el apícola, que han formado parte de la forma de vida del mundo rural canario incluso desde la época aborigen.

Esta actividad económica presenta de cara al futuro buenas perspectivas de consolidación y mejora, ya que hay sectores que cubren un porcentaje muy pequeño del mercado interior y tienen mucho margen de crecimiento hasta alcanzar niveles cercanos al autoabastecimiento.

En los últimos años, las explotaciones pecuarias han sufrido el desarrollo de la actividad urbana, el incremento de las segundas residencias y el aumento de la presión sobre el territorio, que se detecta, de forma especial, sobre el suelo rústico en el que se asientan estas empresas.

La actividad de los ganaderos -instalada sobre suelo rústico desde antes de que la presión sobre el territorio permita el desarrollo de un núcleo urbano, al margen de la normativa- es rechazada por los vecinos recién llegados a la zona, que presionan al ayuntamiento contra las granjas. En este conflicto, los municipios se inclinan por apoyar a los nuevos vecinos y rechazan otorgar licencias a los ganaderos.

Estos inconvenientes han llevado a la Consejería de Agricultura, Pesca y Alimentación a solicitar de los cabildos insulares la creación de polígonos agropecuarios dentro de los planes territoriales especiales que prevén los planes insulares de ordenación en cada una de las islas.

En línea con esta propuesta de la Consejería, el Cabildo de Tenerife ha elaborado un plan para llevar a cabo una clasificación y ordenación de esta actividad en su Isla para estructurar y marcar sus pautas de crecimiento y desarrollo futuro.

Un desarrollo futuro es lo que buscan también actividades como la acuicultura, que es objeto de un profundo estudio en un artículo publicado en este número de Canarias Agraria y Pesquera, o la agricultura biológica, una forma de enfocar la actividad agraria desde un punto de vista más natural y respetuoso con el entorno, con el suelo y con los propios cultivos.

Una recién creada asociación de agricultores pretende difundir este tipo de cultivos entre otros agricultores que puedan estar interesados en estas prácticas y entre el resto de la sociedad, que cada vez en mayor medida comienza a interesarse por este tipo de agricultura más preocupada por el medio ambiente.



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LA NUEVA AGRICULTURA

Domingo Herrera se ha propuesto difundir la agricultura biológica en las Islas a través de sus cultivos y de cursos y apoyo a otros agricultores interesados en estas prácticas. Herrera explica cómo es este tipo de agricultura y sus métodos respetuosos con el suelo y con las plantas.

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Varios agricultores constituyen la Asociación Biológica Agraria de Canarias (ABAC), una asociación pionera en las Islas y fuera de ellas.



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Nuestros Animales Tradicionales habla en este número del Camello Majorero, un animal que antaño tuvo una gran importancia ganadera.

Extracto del Estudio de la influencia de la acuicultura en la comunidad mesozooplancónica de zonas costeras de la isla de Tenerife



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





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l'ensemble de nos lecteurs



septembre 2004 - N° 461

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édito

Point P.I.C.

Depuis 3 ans, l'Inra développe un programme pluridisciplinaire sur la protection intégrée des cultures. Le dossier du mois fait le point sur certains travaux engagés dans ce cadre. Gestion du climat au niveau de la niche écologique des bioagresseurs et des défenseurs des cultures, connaissance de la dynamique des populations des pathogènes, détection précoce d'une agression, possibilités de lutte biologique combinée contre plusieurs pathogènes... autant d'axes de travail poursuivis par ces équipes sur 2 modèles de culture pertinents: la tomate et le rosier sous serre lourde.

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Espaces verts

23 SET. 2004

Biodiversité et paysage : même combat

La biodiversité et le paysage entament une symbiose. Maintien ou création de corridors écologiques, protection des biotopes (page 17), diversification de la palette végétale en tenant compte des conditions de milieu (pages 12 et 14), autant de signes montrant que la diversité biologique et le paysage sont désormais imbriqués. Le réaménagement de l'avenue du Maréchal Leclerc à Sète (page 6), la démarche Natura 2000 Alpilles ou la gestion d'espaces verts en Afrique du Sud sont des exemples concrets de ce nouveau mode de raisonnement.

Le patrimoine arboré est une des composantes de cette biodiversité. La sauvegarde d'arbres remarquables (page 20) contribue à valoriser nos paysages. En milieu contraignant, il est important de planter l'arbre adapté au contexte et de raisonner les interventions pour apporter une plus-value à notre environnement (pages 30 et 35).

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43 Diversité de la flore adventice en espaces verts

Influence de la région, du site et du revêtement (2^e partie)

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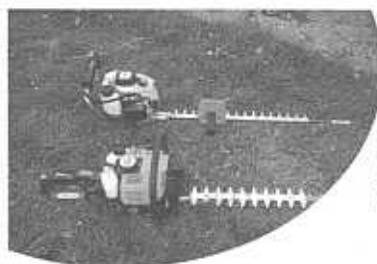
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L'Adivet a organisé en mars dernier une conférence au siège du Centre scientifique et technique du bâtiment pour sensibiliser les architectes et donneurs d'ordres à l'intérêt de la végétalisation extensive des toitures. Au-delà de cette opération de prosélytisme, un véritable argumentaire technique a été élaboré.



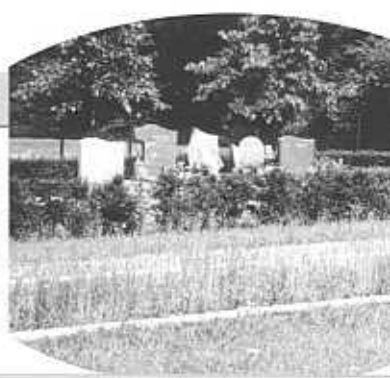
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Les taille-haies classiques sont bien connus du grand public (au contraire des taille-haies sur perche apparus ces dernières années) et des professionnels. Présentation (non-exhaustive) de la large gamme disponible.



page 43

Pour s'attaquer chimiquement aux adventices, mieux vaut les démasquer parfaitement. Une étude menée par la Protection des végétaux et l'Union des entreprises pour la protection et la santé des jardins et des espaces verts a appréhendé les liens éventuels entre le profil malherbologique d'un site et ses caractéristiques (type de site ou de revêtement, zone géographique).





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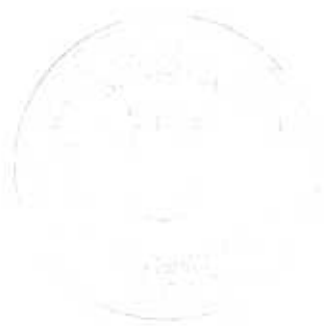
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SPIRIT AT GUSEV CRATER

A portion of the "Mission Success" panorama acquired by the Pancam instrument onboard the Mars Exploration Rover Spirit on 8 January 2004, around 10:30 a.m. local solar time. The view is to the east; the Columbia Hills in the distance are about 2.5 km away and 100 to 200 m in height. This is an approximate true-color rendering of the scene generated from Pancam's 750-nm, 530-nm, and 480-nm filters. [Photo: NASA/JPL/Cornell]

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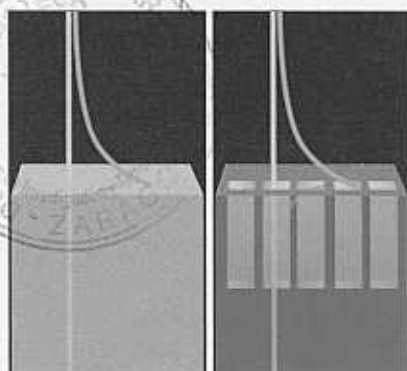
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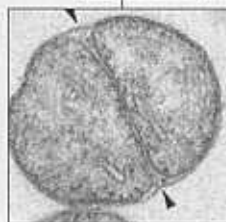
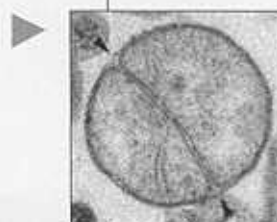
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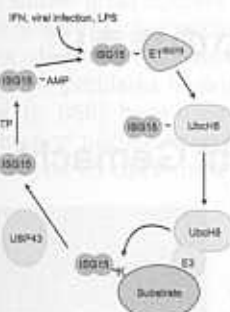
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TOWARD A HYDROGEN ECONOMY

Policymakers around the world are calling for major energy-consuming nations to move from reliance on fossil fuels to an energy economy mediated by hydrogen. A special section starting on page 957 assesses the prospects for such a transition and describes technological developments necessary for making it a reality. [Image: Stephen R. Wagner]

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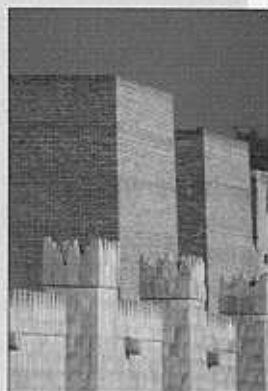
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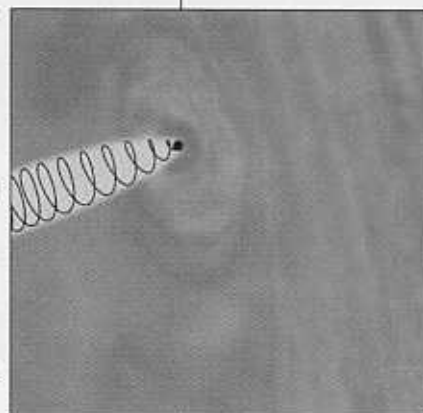
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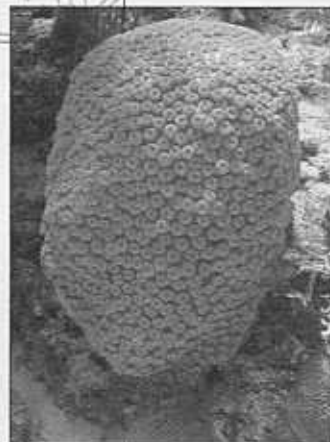


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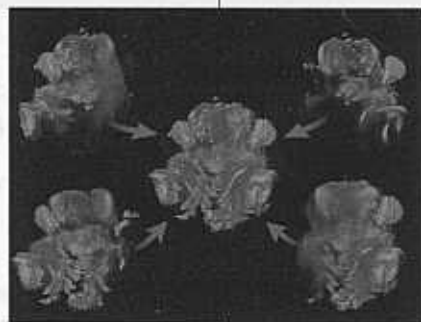
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COVER This exquisitely preserved fossil from Spaniard's Bay, Newfoundland, is an example of the oldest known complex life forms on Earth. Frondlets 1 to 5 cm long with fractal-like branching (left) were combined as modules to form decimeter-to-meter-scale frondose, plumose, and bush-shaped organisms that dominated marine ecosystems 575 to 560 million years ago. See page 1141. [Photo: G. Narbonne]

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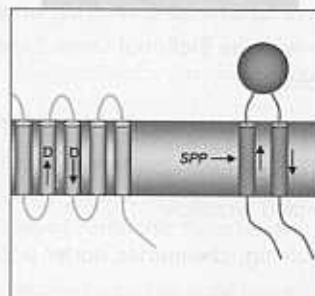
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PSYCHOLOGY: Numerical Cognition Without Words: Evidence from Amazonia

P. Gordon

The Pirahã, an Amazonian tribe, cannot count more than three items, but may be able to estimate larger quantities. *related News story page 1093*

STRUCTURAL BIOLOGY: Crystal Structure of a Shark Single-Domain Antibody V Region in Complex with Lysozyme

R. L. Stanfield, H. Dooley, M. F. Flajnik, I. A. Wilson

Single-chain antibodies from the nurse shark contain two antigen-recognizing regions, whereas mammals have three, yet the shark antibodies bind just as tightly.

CHEMISTRY: DNA-Templated Organic Synthesis and Selection of a Library of Macrocycles

Z. J. Gartner, B. N. Tse, R. Grubina, J. B. Doyon, T. M. Snyder, D. R. Liu

DNA-tagged peptide-like building blocks, brought together with longer complementary DNA strands, enable ring formation and selection of a variety of macrocyclic molecules.

PLANETARY SCIENCE: Jupiter's Atmospheric Composition from the Cassini Thermal Infrared Spectroscopy Experiment

V. G. Kunde, F. M. Flasar, D. E. Jennings, B. Bézard, D. F. Strobel, B. J. Conrath, C. A. Nixon, G. L. Bjoraker, P. N. Romani, R. K. Achterberg, A. A. Simon-Miller, P. Irwin, J. C. Brasunas, J. C. Pearl, M. D. Smith, G. S. Orton, P. J. Gierasch, L. J. Spilker, R. C. Carlson, A. A. Mamoutkine, S. B. Calcutt, P. L. Read, F. W. Taylor, T. Fouchet, P. Parrish, A. Barucci, R. Courtin, A. Coustenis, D. Gautier, E. Lellouch, A. Marten, R. Prangé, Y. Biraud, C. Ferrari, T. C. Owen, M. M. Abbas, R. E. Samuelson, F. Raulin, P. Ade, C. J. Césarsky, K. U. Grossman, A. Coradini

Jupiter's stratosphere contains methyl radical and diacetylene as well as locally high levels of carbon dioxide and hydrogen cyanide that still remain from the Comet Shoemaker-Levy 9 impact.

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Comment on "Network Motifs: Simple Building Blocks of Complex Networks" and "Superfamilies of Evolved and Designed Networks"

Y. Artzy-Randrup, S. J. Fleishman, N. Ben-Tal, L. Stone

full text at www.sciencemag.org/cgi/content/full/305/5687/1107c

Response to Comment on "Network Motifs: Simple Building Blocks of Complex Networks" and "Superfamilies of Evolved and Designed Networks"

R. Milo, S. Itzkovitz, N. Kashtan, R. Levitt, U. Alon

full text at www.sciencemag.org/cgi/content/full/305/5687/1107d

BREVIA

1124 MEDICINE: Intercontinental Spread of Pyrimethamine-Resistant Malaria

C. Roper, R. Pearce, S. Nair, B. Sharp, F. Nosten, T. Anderson

Malaria parasites resistant to the most cost-effective treatment have migrated from Southeast Asia to Africa, where drug resistance is now spreading.

REPORTS

1125 PHYSICS: Observation of a One-Dimensional Tonks-Girardeau Gas

T. Kinoshita, T. Wenger, D. S. Weiss

Varying the interaction strength between bosons confined in one dimension can make them behave like fermions, confirming theory.

PHYSICS

1128 Observation of the Pairing Gap in a Strongly Interacting Fermi Gas

C. Chin, M. Bartenstein, A. Altmeyer, S. Riedl, S. Jochim, J. H. Denschlag, R. Grimm

1131 Pairing Gap and In-Gap Excitations in Trapped Fermionic Superfluids

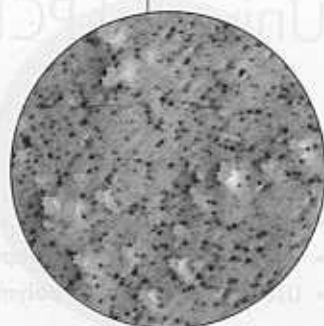
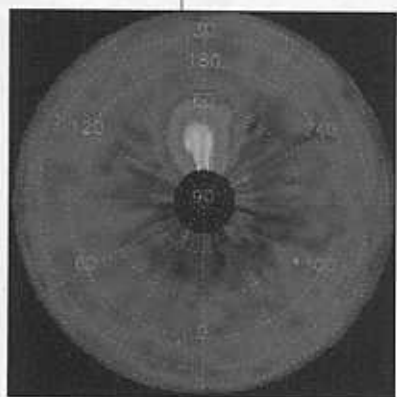
J. Kinnunen, M. Rodríguez, P. Törmä

Lithium atoms composing a cold Fermi gas become a superfluid as the interactions between paired atoms increase, producing a characteristic energy gap consistent with theory. *related Perspective page 1114*

1133 MATERIALS SCIENCE: Sudden Onset of Pitting Corrosion on Stainless Steel as a Critical Phenomenon

C. Punckt, M. Bölscher, H. H. Rotermund, A. S. Mikhailov, L. Organ, N. Budiansky, J. R. Scully, J. L. Hudson

Direct observation shows that corrosion in steel can propagate suddenly and rapidly when small pits induce local chemical changes that catalyze further pitting.

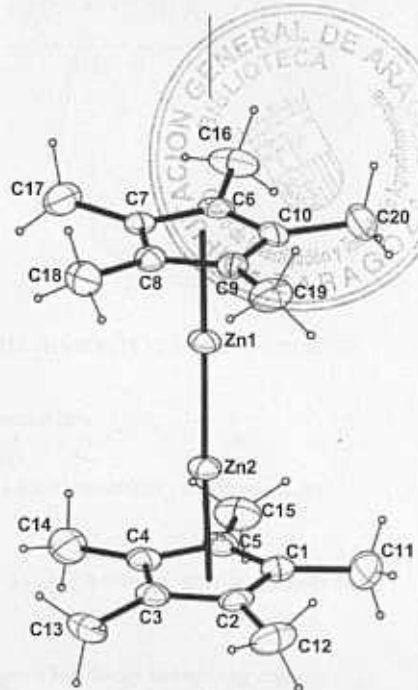


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- 1141 PALEONTOLOGY: Modular Construction of Early Ediacaran Complex Life Forms**
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- 1153 Enhanced Dendritic Cell Antigen Capture via Toll-Like Receptor-Induced Actin Remodeling**
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- 1157 DEVELOPMENTAL BIOLOGY: NOBOX Deficiency Disrupts Early Folliculogenesis and Oocyte-Specific Gene Expression**
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- 1160 IMMUNOLOGY: Uracil DNA Glycosylase Activity Is Dispensable for Immunoglobulin Class Switch**
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- 1163 CANCER: Gefitinib-Sensitizing EGFR Mutations in Lung Cancer Activate Anti-Apoptotic Pathways**
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 Lung cancers that respond to the new drug gefitinib have an unusual ability to resist cell death signals.



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Iris Mack is not your typical mathematician.

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Iris Mack breaks common stereotypes about math and mathematicians.

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GLOBAL/CANADA: Funding Face-Off A. Fazekas

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US: Tooling Up—First Impressions D. Jensen

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US: The Other Side of the Table R. Sonty

The senior director of Worldwide Development at Pfizer Global Pharmaceuticals offers interviewing tips.

UK: Science as a Second Career Choice P. Dee

Phil Dee left the world of finance for a job in academia.

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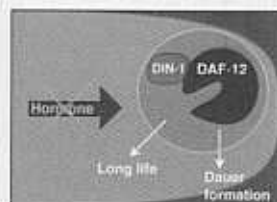
The *Rtel* gene encodes a helicase-like protein that functions in the regulation of telomere length.

News Focus: Membranes of Death M. Leslie

Molecule prevents suicide triggered by cell's protein factories.

News Focus: Hardy Helper R. J. Davenport

Molecular partner urges worm protein to trigger survival pathway.



Teaming up to foster survival.



Arabidopsis thaliana, a model for plant signaling.

science's stke www.stke.org SIGNAL TRANSDUCTION KNOWLEDGE ENVIRONMENT

CONNECTIONS MAP: Arabidopsis Ethylene Signaling Pathway A. N. Stepanova and J. M. Alonso

A MAPK cascade may mediate ethylene signals in *Arabidopsis*.

CONNECTIONS MAP: Arabidopsis Jasmonate Signaling Pathway R. Liechti, A. Gfeller, E. E. Farmer

Genetic analysis reveals links to the ethylene pathway.

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COVER Weighing reward versus punishment. Many people voluntarily incur costs to punish unfair behavior of others. The reason for such altruistic punishment and its neural basis are discussed on page 1254. [Image: Comstock/Alamy Images]



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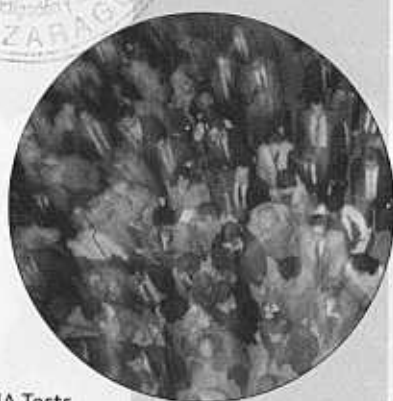
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ECOLOGY: The Impact of United States Recreational Fisheries on Marine Fish Populations

F. C. Coleman, W. F. Figueira, J. S. Ueland, L. B. Crowder

Analysis of United States marine fisheries records shows that recreational fishing has been a significant, sometimes major factor in the decline of several fish stocks. *related News story page 1235*

CELL BIOLOGY: Soma-Germ Line Competition for Lipid Phosphate Uptake Regulates Germ Cell Migration and Survival

A. D. Renault, Y. J. Sigal, A. J. Morris, R. Lehmann

In developing flies, germ and somatic cells compete for the same lipid phosphate: When expressed in germ cells, germ cell migration is aided, but when expressed by somatic cells, germ cells are repelled.

CHEMISTRY: The Structure of Catalytically Active Au on Titania

M. S. Chen and D. W. Goodman

Gold bilayers that completely cover a well-ordered titanium oxide film are much better at catalyzing CO oxidation than distributed gold clusters with a higher surface area.

BREVIA

1253 BIOCHEMISTRY

Chiral-Selective Aminoacylation of an RNA Minihelix

K. Tamura and P. Schimmel

Synthesis of a chirally selective tRNA-like helix suggests why proteins contain L- rather than D-amino acids.

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1254 NEUROSCIENCE: The Neural Basis of Altruistic Punishment

D. J.-F. de Quervain, U. Fischbacher, V. Treyer, M. Schellhammer, U. Schnyder, A. Buck, E. Fehr

When people punish others who are deceitful, the reward centers of the brain are engaged even if the action yields no apparent benefit. *related Perspective page 1246*

1258 NEUROSCIENCE: Spatial Representation in the Entorhinal Cortex

M. Fyhn, S. Molden, M. P. Witter, E. I. Moser, M.-B. Moser

A rat's position in space can be represented in the medial entorhinal cortex in addition to the neighboring hippocampus, the area previously thought to be the only locus of spatial information. *related Perspective page 1245; Report page 1295*

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1264 ASTROPHYSICS: Search for Low-Mass Exoplanets by Gravitational Microlensing at High Magnification

F. Abe, D. P. Bennett, I. A. Bond, S. Eguchi, Y. Furuta, J. B. Hearnshaw, K. Kamiya, P. M. Kilmartin, Y. Kurata, K. Masuda, Y. Matsubara, Y. Muraki, S. Noda, K. Okajima, A. Rakich, N. J. Rattenbury, T. Sako, T. Sekiguchi, D. J. Sullivan, T. Sumi, P. J. Tristram, T. Yanagisawa, P. C. M. Yock, A. Gal-Yam, Y. Lipkin, D. Maoz, E. O. Ofek, A. Udalski, O. Szewczyk, K. Zebur, I. Soszyński, M. K. Szymański, M. Kubiak, G. Pietrzyński, L. Wyrzykowski

Microlensing, in which a nearby star amplifies the light of a distant star, can reveal a stellar disk with sufficient resolution to allow direct detection of extrasolar planets.

1267 PHYSICS: Direct Measurement of Light Waves

E. Goulielmakis, M. Uiberacker, R. Kienberger, A. Baltuska, V. Yakovlev, A. Scrinzi, Th. Westerwalbesloh, U. Kleineberg, U. Heinzmann, M. Drescher, F. Krausz

Electrons generated with an attosecond light pulse are used to image a light wave directly, including the dynamic properties of its electrical field.

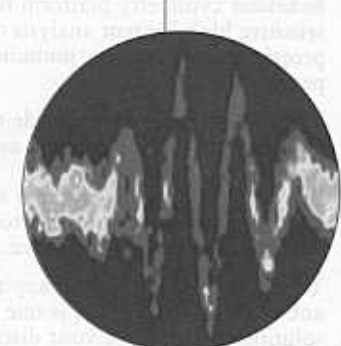
1269 APPLIED PHYSICS: Nanoribbon Waveguides for Subwavelength Photonics Integration

M. Law, D. J. Sirbulu, J. C. Johnson, J. Goldberger, R. J. Saykally, P. Yang

Zinc and tin oxide nanoribbons can function as optical waveguides and are used to form complex optical networks.



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1273 MATERIALS SCIENCE: Transparent, Conductive Carbon Nanotube Films

Z. Wu, Z. Chen, X. Du, J. M. Logan, J. Sippel, M. Nikolou, K. Kamaras, J. R. Reynolds, D. B. Tanner, A. F. Hebard, A. G. Rinzler

Optically transparent carbon nanotube films with uniform thickness can be made as large as 80 square centimeters by using a vacuum filtration procedure.

1277 GEOLOGY: Evidence for Deep Magma Injection Beneath Lake Tahoe, Nevada-California

K. D. Smith, D. von Seggern, G. Blewitt, L. Preston, J. G. Anderson, B. P. Wernicke, J. L. Davis

A swarm of small earthquakes in 2003 deep beneath east-central California was surprisingly coincident with changes in elevation at the surface and might reflect magma movement in the lowermost crust.

1280 CHEMISTRY: Powering Fuel Cells with CO via Aqueous Polyoxometalates and Gold Catalysts

W. B. Kim, T. Voigt, G. J. Rodriguez-Rivera, J. A. Dumesic

Carbon monoxide, a ubiquitous by-product in hydrogen production that can poison fuel cells, can be oxidized via a gold catalyst in a fuel cell to generate electricity. *related News story page 1225*

1283 MICROBIOLOGY: Plasminogen Is a Critical Host Pathogenicity Factor for Group A Streptococcal Infection

H. Sun, U. Ringdahl, J. W. Homeister, W. P. Fay, N. C. Engleberg, A. Y. Yang, L. S. Rozek, X. Wang, U. Sjöbring, D. Ginsburg

"Flesh-eating" bacteria specifically infect humans because they carry an enzyme necessary for infection that binds only to human plasminogen.

1286 MICROBIOLOGY: E Protein Silencing by the Leukemogenic AML1-ETO Fusion Protein

J. Zhang, M. Kalkum, S. Yamamura, B. T. Chait, R. G. Roeder

A chromosome that is broken in leukemia causes formation of an abnormal transcription factor that cannot properly regulate its target genes, suggesting how certain pathways may be silenced in leukemia.

1289 MOLECULAR BIOLOGY: Small Interfering RNA-Induced Transcriptional Gene Silencing in Human Cells

K. V. Morris, S. W.-L. Chan, S. E. Jacobsen, D. J. Looney

Small interfering RNAs can silence genes in human cells as they do in plants, yeast, and flies, possibly by methylating DNA.

1292 MEDICINE: Impaired Degradation of Mutant α -Synuclein by Chaperone-Mediated Autophagy

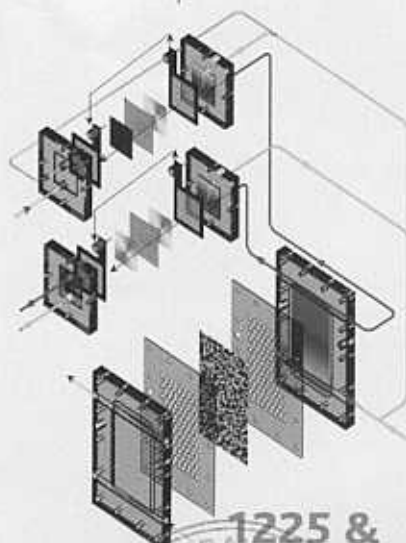
A. M. Cuervo, L. Stefanis, R. Fredenburg, P. T. Lansbury, D. Sulzer

The mutant forms of synuclein that cause Parkinson's disease block their own degradation as well as that of other proteins, possibly contributing to disease pathology.

1295 NEUROSCIENCE: Distinct Ensemble Codes in Hippocampal Areas CA3 and CA1

S. Leutgeb, J. K. Leutgeb, A. Treves, M.-B. Moser, E. I. Moser

In rats, one section of the hippocampus codes for individual aspects of physical spaces, whereas another reacts to common features, a distinction that is reflected by different information-processing capacities. *related Perspective page 1245; Research Article page 1258*



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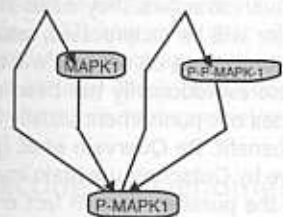
Bacteria foster long life in young flies.

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Molecular manipulations turn ordinary mice into athletic stars.



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Learn how to use this online database to model and organize information about biochemical reactions.

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Evolution des prix agricoles dans l'UE en janvier 2004

Statistiques en bref

AGRICULTURE ET PECHE

23/2004

Agriculture

Auteur
Dolores Linares

Contenu

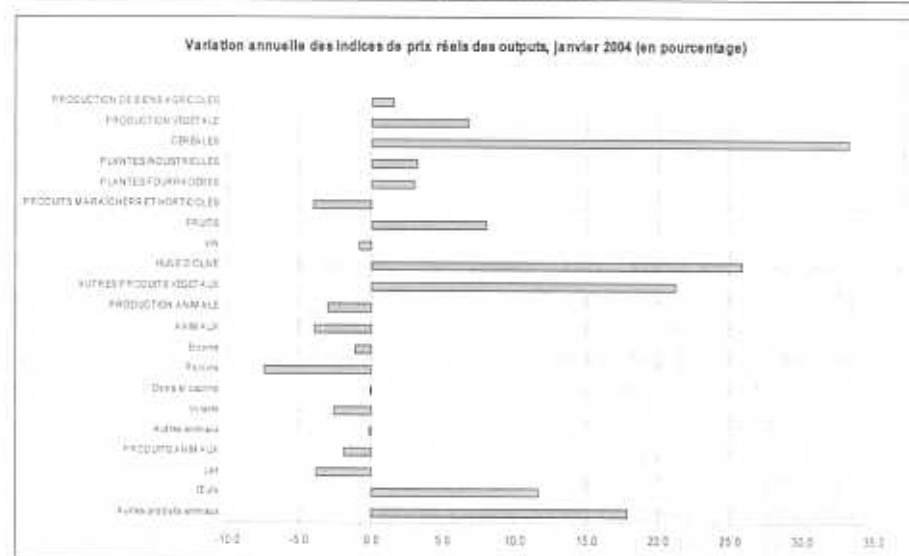
En janvier 2004, les prix des outputs agricoles de l'UE-15 ont été de 1,6 % supérieurs, en termes réels, à ceux de l'année précédente..... 1

En janvier 2004, les prix des inputs de l'UE-15 ont été de 2,3 % supérieurs à ceux de janvier 2003 2

En janvier 2004, les termes de l'échange de l'agriculture ont été de 0,5 % inférieurs au niveau de l'année précédente.. 2

Avertissement : Eurostat et les États membres procèdent au rebase des indices des prix agricoles (1995=100 à 2000=100) et tous les indices figurant dans le présent rapport ont été calculés sur la nouvelle base. Pour certains États membres, Eurostat a effectué les calculs ad hoc (pour de plus amples détails, voir les notes méthodologiques du présent rapport).

En janvier 2004, les prix des outputs agricoles de l'UE-15 ont été de 1,6 % supérieurs, en termes réels, à ceux de l'année précédente¹



- Comme au cours des huit mois précédents, l'indice des prix de l'ensemble des *produits végétaux* pour le mois de janvier a été de 6,8 % supérieur à celui du même mois de 2003. À l'exception des *produits maraîchers et horticoles* (-4,0 %) et du *vin* (-0,9 %), tous les groupes ont enregistré une croissance et, en particulier, les *céréales* (+33,2 %), l'*huile d'olive* (+25,8 %) et les *autres produits végétaux* (+21,2 %). L'indice des prix des *fruits* a également considérablement progressé (+8 %) par rapport à l'indice relevé au cours des deux derniers mois de l'année précédente: respectivement +4,1 % et +1,2 %.
- L'indice global des prix des *animaux et produits animaux* a baissé de 3,1 % par rapport au mois de janvier 2003. Séparément, chacun des deux groupes accuse une diminution (-4 % pour les *animaux* et -1,9 % pour les *produits animaux*). Pour les *animaux*, c'est le prix de tous les postes qui a baissé. Les reculs de prix les plus significatifs ont été observés pour les *porcins* (-7,5 %) et la *volaille* (-2,6 %). Pour les *produits animaux*, en revanche, le *lait* a été le seul produit dont le niveau a été inférieur à celui de l'année précédente, tandis que les *œufs* et les *produits animaux* ont accusé une forte augmentation (+11,7 % et +17,9 %).
- Les prix des outputs ont diminué dans six États membres (voir tableau 2). Parmi les neuf États membres ayant enregistré une progression des prix des outputs, le taux le plus élevé (+12,6 %) a été observé au Royaume-Uni et le taux le plus bas, en Allemagne et au Luxembourg (inférieur à 1 %).



¹ Sauf indication contraire, toutes les variations de l'indice mentionnées dans le présent numéro de «Statistiques en bref» sont exprimées en termes réels (déflatés).

Les maladies professionnelles en Europe en 2001

Statistiques en bref

POPULATION ET CONDITIONS SOCIALES

15/2004

Travail

Auteurs
*Antti Karjalainen,
Elodie Niederlaender*

Contenu

**Maladies professionnelles
figurant sur la liste obligatoire
pour la collecte des données
SEMP** 2

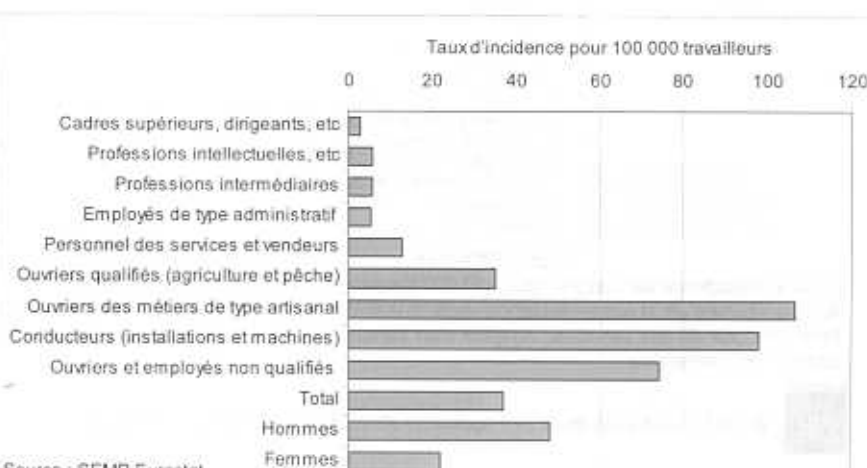
**Maladies professionnelles de la
liste complémentaire de la
collecte des données SEMP** 5

**Liste européenne des maladies
professionnelles**..... 5

Sur la base des expériences acquises dans le cadre d'une collecte pilote de données réalisée en 1998 (données de 1995), Eurostat a recueilli une première série de statistiques européennes des cas reconnus de maladies professionnelles (SEMP) pour l'année de référence 2001. En matière de maladies professionnelles, les procédures de reconnaissance et les régimes de sécurité sociale diffèrent dans chaque État membre et les données de base incluent seulement les 68 maladies professionnelles couvertes par tous les systèmes nationaux. 31 945 nouveaux cas de ces maladies professionnelles ont été reconnus par les autorités nationales des 12 États membres (Belgique, Danemark, Espagne, Irlande, Italie, Luxembourg, Pays-Bas, Autriche, Portugal, Finlande, Suède et Royaume-Uni) qui ont fourni des données SEMP pour l'année de référence 2001. L'extrapolation de ces chiffres en fonction du ratio de la population ayant un emploi permet d'estimer à 52 884 le nombre de cas dans l'UE-15.

- Le taux d'incidence pour 100 000 travailleurs est plus élevé parmi les hommes (48) que chez les femmes (22). Cela s'explique principalement par le fait que, dans les professions où certaines maladies sont plus fréquentes (comme les maladies liées à l'amiante ou la perte auditive due au bruit), les effectifs sont composés en majorité d'hommes. Le taux d'incidence augmente avec l'âge (tableau 1).
- Le taux d'incidence était environ 40 fois plus élevé chez les artisans et ouvriers des métiers de type artisanal que chez les membres de l'exécutif et des corps législatifs, hauts fonctionnaires des services publics, dirigeants et cadres de direction des entreprises (graphique 1). Si l'on examine la situation par activité économique, c'est dans les industries extractives, l'industrie manufacturière et la construction que le taux d'incidence était le plus élevé (tableau 1).
- Les dix maladies professionnelles les plus fréquentes dans les 12 États membres ont été les suivantes : synovite de la main et du poignet (5 379 cas), épicondylite du coude (4 585), dermite de contact (4 457), perte auditive due au bruit (4 068), syndrome de Raynaud (dû aux vibrations ou doigt mort) (3 120), syndrome du canal carpien (2 483), mésothéliome (1 168), asthme (1 075), asbestose (738) et pneumoconiose des mineurs de charbon (547) (tableau 2).
- Dans la liste européenne des maladies professionnelles, la majorité des cas relèvent des catégories principales de maladies suivantes : maladies provoquées par des agents physiques (20 937 cas), maladies provoquées par l'inhalation de substances (5 535) et maladies de la peau (4 357) (tableau 3).

Graphique 1: Taux d'incidence des maladies professionnelles par profession



Source : SEMP Eurostat



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Sugar and Sweetener Situation and Outlook Yearbook

Stephen Haley and Nydia Suarez

Abstract

The Sugar and Sweetener Yearbook contains U.S. and world data on acreage, yield, and production of sugar crops; production, trade, supply and use, and prices for sugar; and supply and use data for caloric and non-caloric sweeteners.

Keywords: Sugar, sugarcane, sugarbeets, corn sweeteners, high fructose corn syrup, glucose syrup, dextrose, honey, maple syrup, molasses, caloric sweeteners, world sugar trade.

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Excel spreadsheet versions of the table printed herein can be downloaded from the ERS website at

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Approved by the World Agricultural Outlook Board. The next *Sugar and Sweetener Situation and Outlook* is scheduled for release on September 2004. Summaries and full text of Situation and Outlook reports may be accessed electronically via the ERS web site at www.ers.usda.gov. The *Sugar and Sweetener Situation and Outlook* is published two times a year and supplemented by a yearbook. To order, call 1-800-999-6779 in the United States or Canada. Other areas please call (703) 605-6220. Or write ERS-NASS, 5285 Port Royal Road, Springfield, VA 22161.



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veterinary parasitology



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